









Drawn from Nature by A. Wilson.

Engraved by J. G. Johnson.

1. Common Coot.
2. Purple Gallinule.
3. Gray Phalarope.
4. Red Phalarope.
5. Wilson's Plover.

AMERICAN ORNITHOLOGY;

OR,

THE NATURAL HISTORY

OF THE

BIRDS OF THE UNITED STATES.

ILLUSTRATED WITH PLATES

Engraved and Colored from Original Drawings taken from Nature.

BY ALEXANDER WILSON.

VOL. IX.

PHILADELPHIA:

PUBLISHED BY BRADFORD AND INSKEEP.

PRINTED BY ROBERT AND WILLIAM CARR.

.....
1814.

District of Pennsylvania, to wit:

* L. S. * BE IT REMEMBERED, That on the fifth day of June, in
***** the thirty-sixth Year of the Independence of the United States
of America, A. D. 1812, ALEXANDER WILSON of the said
District, hath deposited in this office the Title of a Book, the
right whereof he claims as Author, in the words following, to wit:

"American Ornithology; or, the Natural History of the Birds of the United
States. Illustrated with Plates, engraved and colored from Original draw-
ings taken from Nature. By Alexander Wilson."

In conformity to the Act of the Congress of the United States, intituled "An Act for the Encouragement of Learning, by securing the copies of Maps, Charts and Books, to the Authors and Proprietors of such Copies during the Times therein mentioned."—And also to the Act, entitled, "An Act supplementary to An Act, entitled "An Act for the Encouragement of Learning, by securing the Copies of Maps, Charts, and Books, to the Authors and Proprietors of such Copies during the Times therein mentioned," and extending the Benefits thereof to the Arts of designing, engraving, and etching historical and other Prints."

D. CALDWELL,
Clerk of the District of Pennsylvania.

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PREFACE.

AT the date of the decease of the author of the AMERICAN ORNITHOLOGY, the editor of this volume was absent from Philadelphia; and it was not until his return that the afflicting tidings of the death of his friend reached his ears. He soon learned that a distinguished confidence had been reposed in him by a nomination to the office of co-executor; and he lost no time in entering upon the duties of that appointment. Upon inspecting the portfolio of Mr. Wilson, three complete sheets of drawings were discovered, which were ready for the hands of the engravers;* and that nothing might be lost which would in any wise add to the treasures of science, the proprietors of the work liberally consented that the engravings should be made, and attached by way of supplement to the eighth volume, as a compliment to the subscribers, accompanied by merely a scientific description of the subjects.

But when the editor calmly reflected upon the nature and object of his appointment, his heart suggested a duty, the performance of which was yet owing to friendship. Some account

* The Great-footed Hawk was included in plate 75, reduced so as to correspond to its companions. But as the original drawing was highly finished, it was resolved to omit the former figure, and to engrave an additional plate from the latter in preference. This arrangement enabled the artist to give greater effect to his subject, by the introduction of appropriate scenery. The advantage to the work is obvious.

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of one who had attracted in an unusual degree the public notice was required, and that relation might possess interest from the circumstances of the knowledge of the narrator derived from intimacy, and his access to materials of the most authentic kind. But the consciousness of his inability to do justice to his subject induced him to pause; and he asked himself whether or no he would incur the charge of presumption, by engaging in an undertaking for which his talents were incompetent. However, he resolved on the attempt; and as he is now sensible that the debt of duty is paid, he is perfectly willing to abide the decision of legitimate criticism, under a full persuasion that strict and impartial justice will be awarded him: which is all that an author has a right to expect.

It has been the aim of the editor to condense the incidents of the biography as much as possible without injuring the effect of the narrative, and to relieve those prominent features of our author's life which are principally interesting. In a word, his attention has been chiefly directed to the tracing of the rise and progress of this work, under the opinion of the propriety of that procedure. In another place the subject may be enlarged upon, and rendered more attractive to the general reader by the addition of some further correspondence of the author, and a critique on his writings. With respect to the events of the early part of Mr. Wilson's life, the editor's stock of materials was slender; and he is not certain that they are correctly stated. But no better information could be obtained without applying to Europe, which circumstances interfered to prevent.

The historical part of the present volume comes next under review. When it was resolved upon, the editor cast his eyes eagerly over the papers and journals of his friend, persuaded that he should there find copious materials to carry into full effect his project of furnishing an account of those birds which were found delineated as before mentioned. But he was mortified to discover of some, merely a few facts scattered throughout the journals, with imperfect descriptions, and of others no record whatever; it having been the practice of Mr. Wilson to make brief notes and hasty sketches, trusting altogether in his ability to fill up and perfect as the occasion demanded. Hence his journals must be considered merely as indexes to his mind, that comprehensive volume, the fair transcripts of which have contributed so much to our delight and instruction.

To say that the editor has spared no diligence to accomplish his undertaking, is a duty which he owes himself: as he is unwilling to be suspected of inattention in an affair of so much responsibility. He is perfectly aware of the disparity which will be obvious between this volume and the preceding as it relates to matter, and trusts that the good sense of the reader will frame his apology. He is yet but a novice in the sublime study of Natural History, commenced indeed under happier auspices, when at the feet of the illustrious Wilson he rejoiced in the fulness of heart in the acquisition of a teacher and a friend. But alas! how often are we compelled to mourn the instability of those enjoyments, which are erected upon the frail basis of mortality!

The plates of this volume, we trust, will bear a strict comparison with any of the foregoing; and it is a source of infinite regret to us, as we expect it will also be to the reader, that they are so few. If the author had lived a short time longer, and had been permitted by health, he would have completed drawings of all the birds which he intended at present to delineate. There are some which he would have been obliged to omit, in consequence of the unhappy war in which our country is involved, preventing a journey to those parts of Georgia and Louisiana where only it would be practicable to obtain them. These, with stragglers, it was contemplated to give, at some future period, in a supplement.

The very day whereon Mr. Wilson was seized with his last illness, he made out a list of those birds which he intended should complete the work for the present. We transcribe it for the satisfaction of the reader:

Undrawn, Aug. 13, 1813.

Gannet,	Albatross,	Crested Grebe,
<i>Young of ditto,</i>	Tropic Bird,	Little Grebe,
Frigate Pelican,	Puffin,	Black-backed Gull,
Brown Pelican,	Razor-bill,	Skua Gull,
Great White Pelican,	Shearwater Petrel,	Kittiwake Gull,
Brown Booby,	Blue Hawk,	Herring Gull,
Corvorant,	Speckled Diver,	Common Gull,
Canada Crane,	Turkey,	Swan.
Shag,		

Of the greater part of the above, not much interesting detail could have been given; some being wanderers of the deep, far remote from our shores, and only occasionally embracing us within their extensive range; and of others very little being known. But of those highly interesting species, the Swan and Turkey, the latter of which is peculiarly our own, we regret exceedingly that no figures and account have been given by Mr. Wilson; as their noble portraits would not only have beautified his work, but their histories from his elegant pen would have been valuable articles in the biography of American birds.

Upon the future Ornithologist will devolve the pleasing duty of completing the history of the Birds of the United States, so ably commenced and carried on by the indefatigable Wilson, with honor to himself and advantage to science and literature. With respect to our country in particular, how much gratitude do we owe that excellent naturalist, for the treasure which he has afforded us in his inestimable work! He has unfolded a rich scene to our view; revealed new wonders to our meditation; and taught us that there cannot be a more rational amusement, than that which springs from the study of the birds, that diversified portion of animated nature. Formerly the winged tribes passed before us, and we merely satisfied ourselves with a transient look. Now, since we have been introduced to their acquaintance, we hail them as friends who enliven our walks by their frolics, incite our curiosity by their habitudes and economy, and charm us with their songs. Whilst walking abroad to survey the glorious works of creation: the green fields, the fragrance-breathing valleys, the

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azure vault—the streams, forests and mountains, of how much interest would all this spacious landscape be devested, if not animated with those emblems of joy and love with which a benevolent Deity hath benefited and adorned our sphere! Then whilst the breezes of May waft to our delighted ears the melody of the groves, let our praises ascend to the God of Nature for having infused into our hearts a relish of those pure pleasures which arise from the contemplation of his works; and for having endued those extraordinary individuals, who have led the way in these studies, with talents and zeal which have entitled them to the noble denomination of *Benefactors of the human race.*

The study of philosophy, particularly that of natural history, has been considered by the wise and good of all polite ages, as not only an elegant recreation, but as contributing greatly to the strengthening of the faculties, and the improving of the heart. “The contemplative hours,” says the amiable Cicero to his friend Varro, “which you spend at your Tusculan villa, are, in my estimation indeed, what alone deserve to be called life: and I would willingly renounce the whole wealth and splendor of the world, to be at liberty to pass my time in the same philosophical manner.” It is in truth the most noble characteristic of philosophy, to be superior to external accidents, and to depend for happiness on ourselves alone. It offers a calm retreat from the cares and the sorrows of life, where the clamor of party dissensions can never reach, and where an oblivion may be found of the injustice and the wickedness of mankind. If we cast our eyes on the world, and witness the result of the various passions which influence the

bulk of our species, the survey may indeed be attended with instruction, but can afford little satisfaction to the virtuous mind. Let us then rejoice that an asylum is provided us, where we may call off our faculties from every thing that may disturb our peace, and fix them on those speculations which are at once an ornament to prosperity, and the support of adversity.*

To the bowers of the Muses, in fine, we are invited to repair, by every consideration which can have weight with the reflective mind. There springs the fountain of whose pure waters we may all partake; the verdure and flowers that adorn its banks are perennial; and there those roses planted by the hands of Wilson, shall attract the attention of the lover of nature—shall delight him with their modest beauty, and shall sooth him with their rich perfumes.

* Vide Cicero's letters, by Melmoth, ii, 252. iii, 18, 21. London, 1753.

GEORGE ORD.

Philadelphia, May 1, 1814.

BIOGRAPHICAL SKETCH
OF
ALEXANDER WILSON.

ALEXANDER WILSON was born in the town of Paisley, in Scotland;* and received the elements of a classical education at a grammar school of his native place. About the age of ten, he had the misfortune to lose his mother; and his father, who was closely engaged in the occupation of a distiller, feeling the necessity of an adjunct in the governance of an infant family, again entered into the matrimonial state.

Young Wilson's father had designed him for a learned profession; but this intention, how agreeable soever to parental feelings, was not relished by the son, who had imbibed some prejudices, which were the cause of the project being abandoned.

The introduction of a step-mother into Mr. Wilson's family, as is too often the case, was productive of unhappiness. The subject of this memoir became the object of aversion, through some unknown cause, to his new guardian; who employed her influence to his disadvantage, with such effect, that the poor lad was compelled to forsake his paternal roof, and to seek an asylum under that of his brother-in-law, William Duncan, who resided at Queen's ferry, on the Frith of Forth. Mr. Duncan was a weaver;

* The year in which he was born could not be ascertained; but it is conjectured by his friends that he was about five-and-forty at his decease.

and young Wilson, convinced, by experience, of the necessity of self-exertion, applied himself with diligence to acquire a knowledge of that trade, at which he continued for several years.

At an early period of his life he evinced a strong desire for learning; and the perusal of old magazines and pamphlets, to which he had ready access, was an additional stimulus to further exertion. His mind, it is reasonable to conjecture, was not a little agitated at the solemn alternative of persecution, or of relinquishing for ever the fostering attentions of a parent, to whom he was most dutifully and affectionately attached; and he experienced consolation by devoting his leisure hours to reading and writing. Poetry attracted his regard; it was the vehicle of sentiments which were in unison with his sanguine feelings: he had early imbibed a love of virtue, and it now assumed a romantic cast, by assimilation with the high-wrought efforts of fancy, combined with the melody of song.

Caledonia is fruitful of versemen: every village has its poets; and so prevalent is the habit of jingling rhymes, that a scholar is considered as possessing no taste, if he do not attune the Scottish lyre to those themes, which the *amor patriæ*, the national pride of a Scotsman has identified with his very existence.

Burns was now in the zenith of his glory. His verses were on the lips of every one; his praises were echoed from the cottage to the palace; and from the unexampled success of this humble son of genius, many aspired to the honors of the laurel, who otherwise would have confined their views of poetical renown to the limited circle of their family or acquaintance. Among this number may be reckoned our Wilson; who, finding from some short essays that he possessed the talent of poetical expression, ventured to exhibit his attempts to his friends, whose approbation encouraged him to renewed perseverance, in the hope of emerging from that condition in society, which his aspiring soul could not but disdain.

Mr. Duncan, with a view of bettering his estate, relinquished the occupation of weaving, and became a travelling merchant, or in common language a Pedler. In his expeditions, young Wilson, now approaching to manhood, frequently accompanied him; and thus was a foundation laid of a love for travelling, which became a ruling passion with our author the remainder of his existence.

Alexander was now left to shift for himself; and as he was completely initiated in the art of trading, he shouldered his pack and cheerfully set out in quest of riches. In a mind of a romantic turn, Scotland affords situations abundantly calculated to arouse all those feelings which the sublime and beautiful in nature inspire. Wilson was a poetical enthusiast; and the bewitching charms of those mountains, valleys and streams, long since immortalized in song, filled his soul with rapture, and enkindled all the efforts of his youthful muse. From a habit of contemplating the works of nature, arose an indifference to the vulgar employment of trading, which became more disgusting at each interview with the Muses; and nothing but the dread of poverty induced him to conform to the dull avocations of common life.

He occasionally contributed essays to various periodical publications, amongst which we may name the *BEE*, conducted at Edinburgh by Dr. Anderson. He likewise was in the habit of frequenting the Pantheon at the same place, wherein a society for debate held their meetings. In this assembly of wits he delivered several poetical discourses, which obtained him considerable applause.

In consequence of his literary attainments, and correct moral deportment, he was admitted to the society of several gentlemen of talents and respectability, who descried in our youth the promise of future eminence. Flattered by attentions which are always grateful to the ingenuous mind, he was emboldened to the design of collecting and publishing his various poetical attempts; hoping thereby to realize funds sufficient to enable him to perse-

vere in the walks of learning, which, to his glowing fancy, were profusely strewed with flowers.

The volume appeared under the title of “Poems, Humorous, Satirical and Serious, by Alexander Wilson.” The writer of this sketch has it now before him; and finds in it the following remarks, in the hand-writing of the author himself: “I published these poems when only twenty-two—an age more abundant in *sail* than *ballast*. Reader, let this soften the rigor of criticism a little.” Dated, “Gray’s ferry, July 6th, 1804.” These poems were in truth the productions of a boy, who composed them under the most disadvantageous circumstances. They answered the purpose for which they were originally intended: to gratify the partiality of friendship, and soften moments of despondency. Their author, in his riper years, lamented his rashness in giving them to the world; and it is to be hoped that no one will be so officious as to draw them from that obscurity, to which he, who gave them existence, sincerely rejoiced to see them condemned. These poems went through two small octavo editions, the last of which appeared in 1791. The author reaped no benefit from the publication.

About this period of his life, the town of Paisley was agitated by a misunderstanding between the Manufacturers and the Weavers; and all the talents of both parties was exerted on the occasion. Young Wilson, attached to his side by the double tie of principle and interest, boldly espoused their cause, and was considered no mean champion in the controversy.

Amongst the Manufacturers there was one of considerable wealth and influence; who had risen from a low origin by a concurrence of fortunate circumstances; and who had rendered himself greatly obnoxious by his avarice and knavery. Him our poetical weaver arraigned in a galling satire, written in the Scottish dialect; which of all languages is perhaps the most fertile of terms of sarcasm or abuse. The piece was published anonymously; and though Wilson was suspected to be the writer, yet

no evidence could be adduced to establish the fact. But unfortunately as he was one night, at a late hour, returning from his printer, some spies, who had been watching his movements, seized upon him; and papers being found in his possession which indicated the author, he was prosecuted for a libel, sentenced to a short imprisonment, and to burn, with his own hands, the piece at the public cross in the town of Paisley. The printer, it is said, was likewise fined for his share in the publication.

In the year 1792, Mr. Wilson wrote his characteristic tale, entitled *Watty and Meg*. This little poem was published anonymously; and possessing considerable merit was by many attributed to Burns. It has obtained more popularity in Scotland than any of the minor essays of our author; and has been ranked with the best productions of the Scottish muse.

He now began to be dissatisfied with his lot. He was poor, and saw no prospect of bettering his condition in his native country. And having heard flattering accounts of America, he conceived the design of forsaking the land of his forefathers, and settling in the United States. With this intention he arranged his affairs; set out for Belfast, in Ireland; engaged his passage in the ship *Swift* of Newyork, captain Steel, bound to Philadelphia; and arrived at Newcastle, in the state of Delaware, on the fourteenth of July, 1794.

We now behold Alexander Wilson in a strange land; without an acquaintance on whose counsels and hospitality he could rely in that state of uncertainty, to which, having no specific object in view, he was of course subjected; without a single letter of introduction; and with only a few shillings in his pocket. But every care was forgotten in his transport at finding himself in the land of freedom. He had often cast a wishful look towards the western hemisphere, and his warm fancy had suggested the idea, that amongst that people only, who maintained the doctrine of an equality of rights, could political justice and happiness be

found. He had become indignant at beholding the influence of the wealthy converted into the means of oppression; and had imputed the wrongs and sufferings of the poor, not to the condition of society, but to the nature and constitution of the government. He was now free; and exulted in his release, as a bird rejoices which escapes from the confinement of the cage. Impatient to set his foot on the soil of the New World, he landed at Newcastle; and shouldering his fowling-piece, directed his route towards Philadelphia, distant about thirty-three miles. The writer of this biography has a distinct recollection of a conversation with Mr. Wilson on this part of his history, wherein he described his sensations on viewing the first bird that presented itself as he entered the forests of Delaware. It was a red-headed Woodpecker, which he shot, and considered the most beautiful bird he had ever beheld.

On his arrival at Philadelphia, he reflected on the most eligible mode of obtaining a livelihood, to which the state of his funds urged immediate attention. He made himself known to Mr. John Aitkin, a copper-plate printer, who on learning his situation gave him employment at that business, at which he continued for a few weeks; and abandoned it for his trade of weaving, having made an engagement with Mr. Joshua Sullivan, who resided on the Pennypack creek, about ten miles north of Philadelphia.

The confinement of the loom did not agree either with Mr. Wilson's habits or inclinations; and learning that there was considerable encouragement afforded to settlers in Virginia, he migrated thither, and took up his residence near Shepherd's Town, in that part of the state known by the name of New Virginia. Here he again found himself necessitated to engage in the same sedentary occupation; and soon becoming disgusted with the place, he returned to his friend, Mr. Sullivan, at Pennypack.

I find from one of his journals, that in the year 1795 he

travelled through the north part of the state of Newjersey, with an acquaintance, in the capacity of a trader, and met with tolerable success.

On his return from the above expedition, he opened a school on the Bustletown road, a short distance from the town of Frankford, Pennsylvania. Being dissatisfied with this situation, he removed to Milestown, and taught in the schoolhouse of that village. In this last place he continued for several years; and being deficient in the various branches of learning, necessary to qualify him for an instructor of youth, he applied himself to study with great diligence; and acquired all his knowledge of the mathematics, which was considerable, solely by his own exertions.

Whilst residing at Milestown, he made a journey on foot to the Gennesee country, for the purpose of visiting a small farm of which he was joint proprietor; and in the space of twenty-eight days traversed an extent of nearly eight hundred miles.

He changed his residence next, for one in the village of Bloomfield, Newjersey, where he again opened a school. But soon being advised of a more agreeable situation, he solicited and received an engagement from the trustees of Union School, in the township of Kingsess; a short distance from Gray's ferry, on the river Schuylkill.

This removal constituted an important era in the life of Mr. Wilson. His schoolhouse and residence being but a short distance from the Botanical Garden of Messieurs Bartram, situate on the western bank of the Schuylkill: a sequestered spot, possessing attractions of no ordinary kind; an acquaintance was soon contracted with that venerable naturalist, Mr. William Bartram, which ripened into an uncommon friendship, and continued without the least abatement until severed by the hand of death. Here it was that Mr. Wilson found himself translated, if we may so speak, into a new existence. He had long been a lover of the works of Nature, and had derived more happiness from the con-

temptation of her simple beauties, than from any other source of gratification. But he had hitherto been a mere novice; he was now about to receive instructions from one, whom the experience of a long life, spent in travel and rural retirement, had rendered qualified to teach. Mr. Bartram soon perceived the bent of his friend's mind, and its congeniality to his own; and took every pains to encourage him in a study, which, while it expands the faculties, and purifies the heart, insensibly leads to the contemplation of the glorious Author of nature himself. From his youth Mr. Wilson had been observant of the manners of birds; and since his arrival in America had found them objects of uncommon interest; but he had not yet viewed them with the eye of a naturalist.

Mr. Bartram possessed some works on natural history, particularly those of Catesby and Edwards. Mr. Wilson perused them attentively; and found himself enabled, even with *his* slender stock of information, to detect errors and absurdities into which these authors had fallen, from a defective mode of studying nature: a mode, which, while it led them to the repositories of dried skins and preparations, and to a reliance on hearsay evidence, subjected them to the imputation of ignorance, which their lives, devoted to the cultivation and promotion of science, certainly would not justify. Mr. Wilson's improvement was now rapid; and the judicious criticisms which he made on the above-mentioned authors, gratified his friend and instructor, who redoubled his encouraging assistance, in order to further one in a pursuit for which his genius, now beginning to develope itself, was evidently fitted.

In his new situation Mr. Wilson had many enjoyments; but he had likewise moments of despondency which solitude tended to confirm. He had addicted himself to the writing of verses and to music; and being of a musing turn of mind had given way to those seductive feelings which the charming scenery of the country, in a susceptible heart, never fails to awaken. This

was a fatal bias, which all his efforts could not counteract or remove. His friends perceived the danger of his state; and one in whose friendship he had placed strong reliance, and to whom he had freely unburthened himself, Mr. Lawson, the engraver, became alarmed for the soundness of his intellect.* There was one subject which contributed not a little to increase his mental gloom, and that was the consideration of the life of penury and dependence to which he seemed destined as the teacher of a country school. Mr. Lawson immediately recommended the renouncing of poetry and the flute, and the substituting of the amusement of drawing in their stead, as being most likely to restore the balance of his mind; and as an employment well adapted to one of his recluse habits and inclinations. To this end, sketches of the human figure, and landscapes, were provided him; but his attempts were so unpromising that he threw them aside with disgust; and concluded that one at his period of life, being near forty, could never succeed in the art of delineation. His friend, Mr. Bartram, now advised a trial at birds; and being tolerably skilful himself, exhibited his port-folio, which was graced with many specimens from his own hands. The attempt was made, and succeeded beyond the expectation of Mr. Wilson or that of his friends. There was a magic in the employment, which aroused all the energies of his soul; he saw, as it were, the dayspring of a new creation; and from being the humble follower of his instructors, he was soon qualified to lead the way in the charming art of imitating the works of the GREAT ORIGINAL.

* Since the above has been in type, the following incident has been communicated to us by Col. Carr, who had it from Mr. Wilson himself. During the time that the latter labored under great depression of spirits, in order to sooth his mind he one day rambled with his gun. The piece by accident slipped from his hand, and in making an effort to regain it the lock was cocked. At that moment had the gun gone off it is more than probable that he would have lost his life, as the muzzle was opposite to his breast. When Mr. Wilson reflected on the danger which he had escaped, he shuddered at the idea of the imputation of suicide, which a fatal occurrence, to one in his frame of mind, would have occasioned. There is room to conjecture that many have accidentally met their end, whose memories have been sullied by the alleged crime of self murder.

If a momentary digression from our subject would be pardoned, the writer of this sketch would suggest the idea of erecting in that classical retreat, Bartram's Botanic Garden, a rural monument or altar, dedicated to the amiable Genius of Painting: as to her inspiration the world is indebted for the AMERICAN ORNITHOLOGY.

That Mr. Wilson likewise succeeded tolerably well in delineating flowers, appears from the following note to Mr. Bartram, dated Nov. 20th, 1803:

"I have attempted two of those prints which Miss Nancy* so obligingly, and with so much honor to her own taste, selected for me. I was quite delighted with the anemone, but fear I have made but bungling work of it. Such as they are I send them for your inspection and opinion; neither of them is quite finished. For your kind advice towards my improvement I return my most grateful acknowledgements.

"The duties of my profession will not admit me to apply to this study with the assiduity and perseverance I could wish. Chief part of what I do is sketched by candle-light; and for this I am obliged to sacrifice the pleasures of social life, and the agreeable moments which I might enjoy in company with you and your amiable friend. I shall finish the other some time this week; and shall be happy if what I have done merit your approbation."

As Mr. Wilson progressed in drawing, he made corresponding advances in a knowledge of Ornithology. He had attentively perused the works of the naturalists of Europe, who had written on the subject of the birds of America; and became so disgusted with their caricatured figures, fanciful theories, fables and misrepresentations, that on turning, as he himself observes, from these barren and musty records to the magnificent repository of the woods and fields—the *Grand Aviary of Nature*, his delight bor-

* Mr. Bartram's niece, now the consort of Col. Carr, of the U. S. army.

dered on adoration.* It was not in the inventions of man, the reveries of the closet philosopher, that the DIVINE WISDOM could be traced; but it was visible in the glorious volume of creation, on the pages of which are inscribed the AUTHOR's lessons of goodness and love, in the conformation, the habitudes, melody and migrations of the feathered tribes, that beautiful portion of the work of his hands.

To invite the attention of his fellow beings to a study attended with so much pleasure and improvement, was the natural wish of one who had been educated in the School of Wisdom. He humbly thought it would not be rendering an unacceptable service to the GREAT MASTER OF CREATION himself, to deduce from objects that every where present themselves in our rural walks, not only amusement and instruction, but the highest incitements to piety and virtue. Moreover, self-gratification, that source of so many of our most virtuous actions, had its share in urging him to communicate his observations to others.† He examined the strength of his own mind and its resources; the undertaking seemed hazardous; he pondered it for a long while before he ventured to mention it to his friends. At length the subject was made known to Mr. Bartram, who freely expressed his confidence in the abilities and acquirements of Mr. Wilson; but from a knowledge of the situation and circumstances of the latter, hinted his fears that the difficulties which stood in the way of such an enterprise were almost too great to be overcome. Wilson was not easily intimidated; the very mention of difficulties suggested to his ardent mind the means of surmounting them, and the glory which would accrue from such an achievement. He had a ready answer to every objection of his cautious friend; and evinced such enthusiasm, that Mr. Bartram trembled lest his intemperate zeal should lead him into a situation, from the embarrassments of which he could not well be extricated.

* See preface to vol. v, *passim*.

† Introduction to vol. i.

The scheme was unfolded to Mr. Lawson, and met his unqualified approbation. But he observed that there were several considerations which should have their weight, in determining in an affair of so much importance. These were frankly stated; and followed by advice, which did not quadrate with Wilson's temperament; who, vexed that his friend would not enter into his feelings, expressed his scorn of the maxims of prudence with which he was assailed, by styling them the offspring of a *cold, calculating, contemptible* philosophy. Under date of March 12th, 1804, he thus writes to the last named gentleman:

"I dare say you begin to think me very ungenerous and unfriendly in not seeing you for so long a time. I will simply state the cause, and I know you will excuse me. Six days in one week I have no more time than just to swallow my meals and return to my *Sanctum Sanctorum*. Five days of the following week are occupied in the same routine of pedagoguing matters; and the other two are sacrificed to that itch for drawing, which I caught from your honorable self. I never was more wishful to spend an afternoon with you. In three weeks I shall have a few days vacancy, and mean to be in town chief part of the time. I am most earnestly bent on pursuing my plan of making a collection of all the birds in this part of North America. Now I don't want you to throw cold water, as Shakspeare says, on this notion, Quixotic as it may appear. I have been so long accustomed to the building of airy castles and brain windmills, that it has become one of my earthly comforts, a sort of a rough bone, that amuses me when sated with the dull drudgery of life."

In the month of October, 1804, Mr. Wilson, accompanied by two of his friends, set out on a pedestrian journey to visit the far-famed Cataract of Niagara, whereof he had heard much, but which he never before had an opportunity of beholding. The magnificent scenery of that beautiful river, as might be expected, filled

the bosom of our Poet with the most rapturous emotions. He gazed upon the cataract with an enthusiasm bordering upon distraction. And ever after declared, that no language was sufficiently comprehensive to convey an adequate idea of that wonderful curiosity.

It is possible, by the force of description of a work of art, or common scene of nature, to raise the fancy to such a degree, that the reality comes short of expectation. But of the Falls of Niagara, it may with truth be observed, that the utmost stretch of the imagination falls infinitely short of portraying the terrific sublimity of the mighty torrent.

On the return of Mr. Wilson, he employed his leisure moments in writing a poetical narrative of the journey. This poem, which abounds with interesting description and pleasing imagery, is entitled **THE FORESTERS**; and was gratuitously tendered to the proprietors of the **Port Folio**, and published in that excellent miscellany.

This expedition was undertaken rather too late in the season, and consequently our travellers were subjected to hardships of which they were not aware. Winter overtook them whilst in the Gennesee country, on their return by the way of Albany; and they were compelled to trudge the greater part of the route through snow midleg deep. Perhaps it may gratify the readers of the poem, which closes at the Falls of Niagara, to be informed, that of the colleagues of the author, one tarried amongst his friends on the Cayuga lake, and the other gave out and took the benefit of a more agreeable mode of travelling. But the hardy Wilson's pride would not permit *him* to be overcome by fatigue or difficulties: he manfully kept the road, refusing to be relieved even of his gun and baggage; and arrived at his home the seventh of December, having been absent fifty-nine days; and traversed in that time upwards of twelve hundred miles. The last day he walked forty-seven miles.

The following letter to Mr. Bartram, illustrative of his views and feelings at this juncture, is interesting in a great degree:

“Gray’s Ferry, December 15th, 1804.

“Though now snugly at home, looking back in recollection on the long, circuitous journey which I have at length finished, through trackless snows, and uninhabited forests; over stupendous mountains, and down dangerous rivers: passing over, in a course of thirteen hundred miles, as great a variety of men and modes of living, as the same extent of country can exhibit in any part of North America—though in this tour I have had every disadvantage of deep roads and rough weather; hurried marches, and many other inconveniences to encounter—yet so far am I from being satisfied with what I have seen, or discouraged by the fatigues which every traveller must submit to, I feel more eager than ever to commence some more extensive expedition; where scenes and subjects entirely new and generally unknown might reward my curiosity; and where perhaps my humble acquisitions might add something to the stores of knowledge. For all the hazards and privations incident to such an undertaking, I feel confident in my own spirit and resolution. With no family to enchain my affections; no ties but those of friendship; and the most ardent love of my adopted country—with a constitution which hardens amidst fatigues; and a disposition sociable and open, which can find itself at home by an Indian fire in the depth of the woods, as well as in the best apartment of the civilized. For these, and some other reasons that invite me away, I am determined to become a traveller. But I am miserably deficient in many acquirements absolutely necessary for such a character. Botany, Mineralogy, and Drawing, I most ardently wish to be instructed in, and with these I should fear nothing. Can I yet make any progress in Botany, sufficient to enable me to be useful? and what would be the most proper way to proceed? I have many leisure moments that should

be devoted to this pursuit, provided I could have hopes of succeeding. Your opinion on this subject will confer an additional obligation on your affectionate friend."

It is worthy of remark, that when men of uncommon talents project any great scheme, they usually overlook those circumstances of minor importance, which ordinary minds would estimate as first deserving attention. Thus Wilson, with an intellect expanded by information, and still grasping at further improvement as a mean of distinction, would fain become a traveller, even at the very moment when the sum total of his funds amounted to *seventy-five cents!**

He now employed all his vacant hours in drawing and the study of Ornithology; being resolutely bent on the accomplishing of his design, of which he became more enamored the longer he reflected on it.

The spring of the year 1805 arrived and gave to the enraptured view of our Naturalist his interesting feathered acquaintance. He listened to their artless songs; he noted their habitudes; he sketched their portraits. And after having passed a few months varied with this charming occupation, he again writes to the respected inhabitant of the Botanic Garden:

"Union School, July 2, 1805.

"I dare say you will smile at my presumption, when I tell you that I have seriously begun to make a collection of drawings of the birds to be found in Pennsylvania, or that occasionally pass through it: twenty-eight as a beginning I send for your opinion. They are, I hope, inferior to what I shall produce, though as close copies of the originals as I could make. One or two of these I cannot find either in your nomenclature, or among the seven volumes of Edwards. Any hint for promoting my plan, or ena-

* This fact the editor had from one of Mr. Wilson's own letters.

bling me to execute better, I will receive from you with much pleasure. I have resigned every other amusement, except reading and fiddling, for this design, which I shall not give up without making a fair trial.

"Criticise these, my dear friend, without fear of offending me—this will instruct, but not discourage me.—For there is not among all our naturalists one who knows so well what they are, and how they ought to be represented. In the mean time accept of my best wishes for your happiness—wishes as sincere as ever one human being breathed for another. To your advice and encouraging encomiums I am indebted for these few specimens, and for all that will follow. *They may yet tell posterity that I was honored with your friendship, and that to your inspiration they owe their existence.*"

The plates illustrative of the natural history of Edwards were etched by the author himself. Mr. Wilson had examined them very attentively, and felt assured that, with a little instruction in the art of etching, he could produce more perfect delineations; and would be enabled, by his superior knowledge of coloring, to finish the figures for his contemplated work in a style not inferior to his spirited and beautiful drawings from nature.

Mr. Lawson was of course consulted on this occasion, and cheerfully contributed his advice and assistance in the novel and difficult enterprise. Wilson procured the copper; and, his friend having laid the varnish and furnished the necessary tools, he eagerly commenced the important operation, on the successful termination of which his happiness seemed to depend.

Let the reader pause and reflect on the extravagance of that enthusiasm, which could lead a person to imagine, that, without any knowledge of an art derived from experience, he could at once produce that effect, which is the result only of years of trial and diligence.

The next day after Mr. Wilson had parted from his preceptor, the latter, to use his own words, was surprised to behold him *bouncing* into his room, crying out—“*I have finished my plate! let us bite it in with the aquafortis at once, for I must have a proof before I leave town!*”* Lawson burst into laughter at the ludicrous appearance of his friend, animated with impetuous zeal; and to humor him granted his request. The proof was taken, but fell far short of Mr. Wilson’s expectations, or of his ideas of correctness. However, he lost no time in conferring with Mr. Bartram, to whom he wrote as follows:

“Nov. 29, 1805.

“I have been amusing myself this some time in attempting to Etch; and now send you a proof sheet of my first performance in this way. Be so good as communicate to me your own corrections, and those of your young friend and pupil. I will receive them as a very kind and particular favor. The drawings which I also send, that you may compare them together, were done from birds in full plumage, and in the best order. My next attempt in etching will perhaps be better, every thing being new to me in this. I will send you the first impression I receive after I finish the plate.”

In a short time another plate was prepared and completed with the despatch of the former. In fulfilment of his promise to his friend, he transmits a proof, accompanied with the following note:

“Mr. Wilson’s affectionate compliments to Mr. Bartram; and sends for his amusement and correction, another proof of

* For the information of those of our readers who are unacquainted with the process of etching, we subjoin the following explanatory note.

On the polished copper-plate a coat of varnish, of a particular composition, is thinly spread. The design is then traced, and cut through to the copper with an instrument termed a point. A bank of wax is now raised around the plate, and aquafortis poured into the enclosure, which eats into the copper only where the point has passed. The length of time requisite for the successful action of the aquafortis, must be determined by the judgment of the operator.

his Birds of the United States. The coloring being chiefly done last night, must soften criticism a little. Will be thankful for my friend's advice and correction.

"Mr. Wilson wishes his beloved friend a happy new-year, and every blessing."

Saturday, January 4th, 1806.

These essays in Etching,* though honorable to Mr. Wilson's ingenuity and perseverance, yet by no means afforded satisfaction. He became now convinced that the *point* alone was not sufficient to produce the intended effect; and that nothing short of the accuracy of the *graver* would in any wise correspond to his ideas of excellence. But in the delightful art of Engraving he had never been instructed; and he could not command means sufficient to cover the expense of the plates even of a single volume, on the magnificent plan which his comprehensive mind had delineated. A proposition was now made to Mr. Lawson to engage in the work on a joint concern. But there were several reasons which this gentleman adduced, sufficiently weighty, in his opinion, to warrant his non-acceptance of the offer. Mr. Wilson finding his schemes thus baffled, declared, with solemn emphasis, his resolution of proceeding alone in the publication, if it even cost him his life. "*I shall at least leave,*" continued he, "*a small beacon to point out where I perished.*"

About the commencement of this year, information was disseminated through the medium of the public prints, that the President of the United States, had it in contemplation to despatch parties of ingenious men, for the purpose of exploring the waters of Louisiana. Mr. Wilson, aroused at the intelligence, now conceived that a favorable opportunity was afforded him of gratifying

* The two first plates of the Ornithology are those which the author etched himself. The editor has in his possession a proof of the first one, which he preserves as a relic of no small value. It is inscribed with the author's name.

a desire, which he had long indulged, of visiting those regions, which he was well convinced were rich in the various objects of science; and particularly where subjects, new and interesting, might be collected for his embryo work on the ornithology of our country. He expressed his wishes to Mr. Bartram, who approved of them; and the latter cheerfully wrote a letter to his friend and correspondent, Mr. Jefferson, wherein Mr. Wilson's character and acquirements were distinctly stated; recommending him as one highly qualified to be employed in that important national enterprise. This introductory, couched in the most gentlemanly terms, covered an application from Mr. Wilson himself, which, as faithful biographers of our deceased friend, we here think proper to insert entire:

“To His Excellency THOMAS JEFFERSON,
“President of the United States.

“Sir,

“Having been engaged, these several years, in collecting materials and furnishing drawings from nature, with the design of publishing a new Ornithology of the United States of America, so deficient in the works of Catesby, Edwards and other Europeans, I have traversed the greater part of our northern and eastern districts; and have collected many birds undescribed by these naturalists. Upwards of one hundred drawings are completed; and two plates in folio already engraved. But as many beautiful tribes frequent the Ohio and the extensive country through which it passes, that probably never visit the Atlantic states; and as faithful representations of these can only be taken from living nature, or from birds newly killed; I had planned an expedition down that river, from Pittsburg to the Mississippi, thence to Neworleans, and to continue my researches by land in return to Philadelphia. I had engaged as a companion and assistant Mr. William Bartram of this place, whose knowledge of Botany, as well as Zoology, would

have enabled me to make the best of the voyage, and to collect many new specimens in both those departments. Sketches of these were to have been taken on the spot; and the subjects put in a state of preservation to finish our drawings from, as time would permit. We intended to set out from Pittsburg about the beginning of May; and expected to reach Neworleans in September.

“ But my venerable friend, Mr. Bartram, taking into more serious consideration his advanced age, being near seventy, and the weakness of his eye-sight; and apprehensive of his inability to encounter the fatigues and deprivations unavoidable in so extensive a tour; having, to my extreme regret, and the real loss of science, been induced to decline the journey; I had reluctantly abandoned the enterprise, and all hopes of accomplishing my purpose; till hearing that your Excellency had it in contemplation to send travellers this ensuing summer up the Red River, the Arkansaw and other tributary streams of the Mississippi; and believing that my services might be of advantage to some of these parties, in promoting your Excellency’s design; while the best opportunities would be afforded me of procuring subjects for the work which I have so much at heart. Under these impressions I beg leave to offer myself for any of these expeditions; and can be ready at a short notice to attend your Excellency’s orders.

“ Accustomed to the hardships of travelling; without a family; and an enthusiast in the pursuit of Natural History, I will devote my whole powers to merit your Excellency’s approbation; and ardently wish for an opportunity of testifying the sincerity of my professions, and the deep veneration with which I have the honor to be,

“ Sir,

“ Your obedient servant,

“ ALEX. WILSON.”*

Kingsess, Feb. 6, 1806.

* Mr. Wilson was particularly anxious to accompany Pike, who commenced his journey from the cantonment on the Missouri, for the sources of the Arkansaw, &c. on the 15th July, 1806.

Mr. Jefferson had in his port-folio decisive proofs of Mr. Wilson's talents as an ornithologist, the latter having some time before transmitted to his Excellency some splendid drawings of nondescript birds, accompanied with scientific descriptions. Yet with these evidences before him, backed by the recommendation of a discerning and experienced Naturalist, so little did Mr. Jefferson regard the pretensions of Genius, and the interests of Science; so unmindful was he of the duties of his exalted station, or the common civilities which obtain amongst people of breeding and refinement; that so far from accepting the services of our accomplished ornithologist, he did not even deign to *reply* to his respectful overture; and Wilson, mortified at the cold, contemptuous neglect, locked up his feelings in his breast, not even permitting a sigh to reach the ear of his most intimate friends. This treatment he did not expect from one, whom his ardent fancy had invested with every excellence; who had been the object of his encomiums, and the theme of his songs:

“*Omne ignotum pro magnifico.*”

We now approach that era of our author's life, in which we behold him emerging from the vale of obscurity, and attaining that enviable distinction in the republic of science and letters, which it is the lot of but few to enjoy.

Mr. Samuel F. Bradford, bookseller, of Philadelphia, being about to publish an improved edition of Rees's New Cyclopædia, Mr. Wilson was introduced to him as one qualified to superintend the work; and was engaged, at a liberal salary, as assistant editor.

Not long after this engagement he unfolded his mind to Mr. Bradford on the subject of an American Ornithology; and exhibited such evidence of his talents for a publication of that nature, that Mr. Bradford promptly agreed to become the publisher, and to furnish the requisite funds; and now for the first time Mr. Wilson found those obstructions removed which had opposed his favorite enterprise.

All things being thus happily arranged, he applied himself to his varied and extensive duties with a diligence which scarcely admitted repose; until finding his health much impaired thereby, he was induced to seek the benefits of relaxation in a pedestrian excursion through a part of Pennsylvania; which afforded him a favorable opportunity of procuring specimens of birds; and some additional information relating to them of which he was very desirous to be possessed. This jaunt was made in the month of August, 1807; and on the return of Mr. Wilson he engaged in his avocations with renewed ardor; devoting every moment, which could be spared from his editorial duties, to his great work.

At length in the month of September, 1808, the first volume of the **AMERICAN ORNITHOLOGY** made its appearance. From the date of the arrangement with the publisher, a prospectus had been issued, wherein the nature and intended execution of the work were specified. But yet no one appeared to entertain an adequate idea of the elegant treat, which was about to be afforded to the lovers of the arts and of useful literature. And when the superb volume was presented to the public, their delight was only equalled by their astonishment, that our country, as yet in its infancy, should produce an original work in science that could vie, in its essentials, with the proudest productions of a similar nature, of the European world.

In the latter part of September, Mr. Wilson set out on a journey to the eastward, to exhibit his book and procure subscribers. He travelled as far as the District of Maine; and returned through Vermont, by the way of Albany, to Philadelphia. From a letter to a friend, dated Boston, October 10th, 1808, we have made the following extract:

“ I have purposely avoided saying any thing either good or bad on the encouragement I have met with. I shall only say, that among the many thousands who have examined my book, and among these were men of the first character for taste and

literature, I have heard nothing but expressions of the highest admiration and esteem. If I have been mistaken in publishing a work too good for the country, it is a fault not likely to be soon repeated, and will pretty severely correct itself. But whatever may be the result of these matters, I shall not sit down with folded hands, whilst any thing can be done to carry my point: since God helps them who help themselves. I am fixing correspondents in every corner of these northern regions, like so many pickets and outposts, so that scarcely a *wren*, or *tit* shall be able to pass along, from York to Canada, but I shall get intelligence of it."

From several individuals, in this journey, Mr. Wilson experienced the most polite and encouraging attentions; but from others, and those too from whom most was expected, he met a reception of an opposite nature, the rudeness of which we should hesitate to record, if the facts were not supported by his own declaration. From his private journal we have taken the following extracts:

"Arrived at ——; waited on Doctor ——, Principal of the seminary. It was near dusk before I could see him; and our conversation, which was held on the steps leading to his house, occupied about five minutes. He considered the volume too expensive for any class of readers about this town. He behaved with cold indifference—turned over a few leaves without any seeming interest; and said, that as far as he could *see* (it was nearly dark) it looked well—returned the volume and we parted. If, as Principal of this College, this literary luminary shed no more cheering influence over the exertions of his pupils, than he did on the author of American Ornithology, I don't much wonder that storms and tempests should desolate this seminary, and damp the energies of its inhabitants."

"Arrived at ——. Called on the Governor at the Health Office; there were several gentlemen in company. He turned over

a few leaves very carelessly; asked some trifling questions; and then threw the book down, saying—“*I don't intend to give an hundred and twenty dollars for the knowledge of birds!*” Taking up a newspaper he began to read. I lifted the book, and, without saying a word, walked off with a smile of contempt for this very *polite* and very *learned* Governor. If science depended on such *animals* as these, the very name would long ere now have been extinct.

“The City Recorder declared that he never read or bought books on animals, fishes, plants, or birds—*he saw no use in them!* Yet this same *reptile* could not abstain from acknowledging the beauty of the plates of my Ornithology.”

If Mr. Wilson had been treated with disrespect by the vulgar or illiterate, he would have imputed it to the right cause—a want of breeding. Or if he had been soliciting encouragement to a work of which he was not enabled to afford a specimen, whereby its character could be estimated, there might be some palliation of conduct, which, placed in the most favorable point of view, must still bear the epithet uncivil. But the author of American Ornithology addressed himself to persons of rank, and of learning; he modestly asked support equal to his merits; he claimed that deference which is ever due to the gentleman; and to prove himself no pretender or impostor, he exhibited his *Diploma regium signo majori consignatum*, the unquestionable credentials of Science herself.

Mr. Wilson after tarrying at home a few days, departed to the southward, visiting every city and town of importance as far as Savannah in the state of Georgia. This journey being performed in the winter, and alone, was of course not attended with many travelling comforts; and, to avoid the inconveniences of a return by land, he embarked in a vessel, and arrived at Newyork in the month of March, 1809. This was rather an unproductive tour: but few subscriptions being obtained.

Of the first volume of the Ornithology only two hundred copies had been printed. But it was now thought expedient to strike off a new edition of three hundred more; as the increasing approbation of the public warranted the expectation of corresponding support.

The second volume was published in January 1810; and our indefatigable ornithologist set out for Pittsburg, the latter part of the same month, on his route to Neworleans. After conferring with his friends on the most eligible mode of descending the Ohio, he resolved, contrary to their dissuasions, on venturing in a skiff by himself; this mode, with all its inconveniences, being considered as best suited to his funds, and as most favorable to his researches. Accordingly, on the twenty-fourth of February, he embarked in his little boat, and bade adieu to Pittsburg. After a variety of adventures he arrived in safety at Louisville, being upwards of seven hundred miles from the place of his departure. Here he disposed of his skiff; and then set out on foot for Lexington, seventy-two miles further. At this last place he purchased a horse; and being prepared for the long and disagreeable route which lay before him, he resolutely explored his way alone; and safely reached the town of Natchez* the seventeenth of May, being a distance of six hundred and seventy-eight miles from Lexington. In his journal he says—"This journey, four hundred and seventy-eight miles from Nashville, I have performed alone, through difficulties, that those who have never passed the road could not have a conception of." We may readily suppose that he had not only difficulties to encounter, encumbered as he necessarily was with his shooting apparatus and increasing baggage, but also dangers, in journeying through a frightful wilderness, where almost impenetrable cane-swamps and morasses present obstacles to the pro-

* For the particulars of this journey from Pittsburg to Natchez, the reader is referred to Mr. Wilson's letters, which have been published in the Port Folio, new series, vols. iii, 499. iv, 310. vii, 34.

gress of the traveller, which require all his resolution and activity to overcome. Added to which, he had a severe attack of the dysentery, when far remote from any situation which could be productive of either comfort or relief; and he was under the painful necessity of trudging on, debilitated and dispirited with a disease, which threatened to put a period to his existence. An Indian having been made acquainted with his situation, recommended the eating of strawberries, which were then fully ripe and in great abundance. On this delightful fruit and newly laid eggs, taken raw, he wholly lived for several days; and he attributed his restoration to health to these simple remedies.

Previously to entering the wilderness, Mr. Wilson had the melancholy satisfaction of shedding tears of sorrow at the grave of his friend, the amiable and intrepid Governor Lewis; who, distracted by base imputations and cruel neglect, closed his honorable and useful life by an inglorious act of suicide, in the cabin of a settler, named Grinder; and was buried close by the common path, with nothing but a few loose rails thrown over his grave.*

On the sixth of June our traveller reached Neworleans, distant from Natchez two hundred and fifty-two miles. As the sickly season was fast approaching, it was deemed advisable not to tarry long in this place; and his affairs being despatched, he took passage in a ship bound to Newyork, at which place he arrived the thirtieth of July; and soon reached Philadelphia, enriched with a copious stock of materials for his work, including several beautiful and hitherto unknown birds.

In the newly settled country through which Mr. Wilson had to pass, in his last journey, it was reasonable not to expect much encouragement in the way of subscriptions. Yet he was honored with the names of many respectable individuals; and received not only civilities, but also kind treatment. From his journal

* For an interesting account of the death of Captain Lewis, by Mr. Wilson, see the Port Folio, new series, vol. vii, page 36.

and letters we might select many passages of much interest to the reader; but the limits allotted to this memoir will not admit of copiousness of detail; and we shall content ourselves with two or three extracts.

"In Hanover, Pennsylvania, a certain Judge H. took upon himself to say, that such a book as mine ought not to be encouraged, as it was not *within the reach of the commonality*; and therefore *inconsistent with our republican institutions!* By the same mode of reasoning, which I did not dispute, I undertook to prove him a greater culprit than myself, in erecting a large, elegant, three-story brick house, so much beyond the reach of the *commonality*, as he called them; and consequently grossly contrary to our republican institutions. I harangued this Solomon of the Bench more seriously afterwards; pointing out to him the great influence of science on a young nation like ours, and particularly the science of Natural History, till he began to show such symptoms of *intellect*, as to seem ashamed of what he had said."

"*March 23d.* I bade adieu to Louisville, to which place I had four letters of recommendation, and was taught to expect much of every thing there; but neither received one act of civility from those to whom I was recommended; one subscriber, nor one new bird; though I delivered my letters, ransacked the woods repeatedly, and visited all the characters likely to subscribe. Science or literature has not one friend in this place."

"*April 25th.* Breakfasted at Walton's, thirteen miles from Nashville. This place is a fine rich hollow, watered by a charming, clear creek, that never fails. Went up to Madison's Lick, where I shot three paroquets and some small birds.

"*26th.* Set out early, the hospitable landlord, ISAAC WALTON, refusing to take any thing for my fare, or that of my horse, saying—"You seem to be travelling for the good of the world; and I cannot, I will not charge you any thing. Whenever you come this way, call and stay with me, you shall be welcome!" This is the

first instance of such hospitality which I have met with in the United States."

"*Wednesday, 23d May.* Left Natchez, after procuring twelve subscribers; and having received a kind letter of invitation from William Dunbar, Esq. I availed myself of his goodness, and rode nine miles along the usual road to his house; where, tho' confined to his bed by a severe indisposition, I was received with great hospitality and kindness; had a neat bed-room assigned me; and was requested to consider myself as at home during the time I should find it convenient to stay in exploring that part of the country."

The letter above mentioned, which is now before us, is worthy of transcription:

"*Forest, 20th May, 1810.*

"Sir,

"It is very unfortunate that I should be so much indisposed as to be confined to my bed-room; nevertheless, I cannot give up the idea of having the pleasure of seeing you as soon as you find it convenient; the perusal of your first volume of Ornithology, lent me by General Wilkinson, has produced in me a very great desire of making your acquaintance.

"I understand, from my boy, that you propose going in a few days to Neworleans, where you will see some small cabinets of natural history that may interest you. But as I presume it is your intention to prosecute your inquiries into the interior of our country, this cannot be done better than from my house as your head quarters; where every thing will be made convenient to your wishes. My house stands literally in the forest, and your beautiful Orioles, with other elegant birds, are our court-yard companions.

"The bearer attends you with a couple of horses, on the supposition that it may be convenient for you to visit us to-day; otherwise he will wait upon you any other day that you shall appoint..

"I am respectfully, &c.

"WILLIAM DUNBAR."

This excellent gentleman, whose hospitality was thus promptly excited, has since paid the debt of nature; and his grateful guest fondly cherished to the last hour of his existence the remembrance of those happy moments which were passed in his society, and that of his amiable and accomplished family.

In September, 1812, Mr. Wilson set off to the eastward, to visit his subscribers. In a letter to the editor he writes:—"I coasted along the Connecticut river to a place called Haverhill, ten miles from the foot of Moose-hillock, one of the highest of the *White Mountains* of Newhampshire. I spent the greater part of a day in ascending to the peak of one of these majestic mountains, whence I had the most sublime and astonishing view that was ever afforded me. One immensity of forest lay below, extended on all sides to the farthest verge of the horizon; while the only prominent objects were the columns of smoke from burning woods, that rose from various parts of the earth beneath to the heavens; for the day was beautiful and serene."

This excursion was succeeded by rather an unpleasant occurrence. The good people of Haverhill perceiving a stranger among them of very inquisitive habits; and who evinced great zeal in exploring the country, sagaciously concluded that he was a spy from Canada, employed in taking sketches of the place, to facilitate the invasion of the enemy. Under these impressions it was thought conducive to the public safety that Mr. Wilson should be apprehended; and he was accordingly taken into the custody of a magistrate, who, on being made acquainted with his character, and the nature of his visit, politely dismissed him, with many apologies for the mistake.

The publication of the *Ornithology* now progressed as rapidly as a due regard to correctness and elegance would permit. In order to become better acquainted with the feathered tribes, and to observe their migrations with more accuracy; as well as to enjoy the important advantages of a rural retirement, Mr. Wilson resi-

ded the better part of the years 1811-12 at the Botanic Garden of his friend, Mr. Bartram. There removed from the noise, bustle and interruption of the metropolis, he was enabled to dispose of his time to the best advantage; for when fatigued with close application within doors, to recruit his mind and body he had only to cross the threshold of his abode, and he at once found himself surrounded by those acquaintance, the observance of whose simple manners not only afforded the most agreeable recreation, but who were perpetually contributing to the great undertaking which he was earnestly laboring to complete.

Besides the journeys which have been already mentioned, he made several short excursions to different parts; and was five times at the coast of Newjersey, in pursuit of the Waders and Web-footed tribes which are there found in immense numbers. The aggregate of his peregrinations amounted to upwards of *ten thousand miles*.

In the early part of the year 1813, the seventh volume of the Ornithology was published; and the author immediately made preparations for the succeeding one, the letter-press of which was completed in the month of August. But unfortunately his great anxiety to conclude the work condemned him to an excess of toil, which, inflexible as was his mind, his bodily frame was unable to bear. He was likewise by this flood of business prevented from residing in the country, where hours of lassitude might have been beguiled by a rural walk, or the rough but invigorating exercise of the gun. At length he was attacked by a disease, which, perhaps, at another period of his life might not have been attended with fatal effects, but which now, in his debilitated frame and harassed mind, proved a mighty foe, whose deadly assaults all the combined efforts of friendship, science and skill could not repel. The Dysentery, after a few days illness, closed the mortal career of Alexander Wilson, on the twenty-third of August, 1813.

It may not be going too far to maintain, that in no age or

nation has there ever arisen one more eminently qualified for a naturalist than the subject of these memoirs. He was not only an enthusiastic admirer of the works of creation, but he was consistent in research; and permitted no dangers or fatigues to abate his ardor or relax his exertions. He inured himself to hardships by frequent and laborious exercise; and was never more happy than when employed in some enterprise which promised from its difficulties the novelties of discovery. Whatever was obtained with ease, to him appeared to be attended, comparatively speaking, with small interest: the acquisitions of labor alone seemed worthy of his ambition. He was no closet philosopher—exchanging the frock of activity for the night-gown and slippers. He was indebted for his ideas, not to books, which err, but to Nature which is infallible; and the inestimable transcript of her works, which he has bequeathed us, possesses a charm which affects us the more the better acquainted we become with the delightful original. His inquisitive habits procured him from others a vast heterogeneous mass of information; but he had the happy talent of selecting from this rubbish whatever was valuable. His perseverance was uncommon; and when engaged in pursuit of a particular object he would never relinquish it, while there was a chance of success. His powers of observation were very acute, and he seldom erred in judgment when favored with a fair opportunity of investigation.

That the industry of Mr. Wilson was great his work will for ever testify. And our astonishment is excited that so much should have been performed in so short a time. When we take into consideration the state of our country, as respects the cultivation of science; and that in the walk of Ornithology particularly, no one, *deserving the title of a Naturalist*, had yet presumed to tread; when we view the labors of foreigners, who have interested themselves in our natural productions, and find how totally incompetent they were, through a deficiency of correct information, to instruct; and

then when we reflect that a single individual, “*without patron, fortune or recompense,*” has accomplished in the short space of *seven* years, as much as the combined body of European naturalists have taken a *century* to achieve, we feel almost inclined to doubt the evidence of our senses. But it is a fact, which we feel a pride in asserting, that we have as faithful, complete and interesting an account of *our* birds in the estimable volumes of the American Ornithology, as the Europeans can at this moment boast of possessing of *their's*. Let those who doubt the correctness of our opinion examine for themselves, and determine according to the dictates of an unbiassed judgment.

We need no other evidence of the unparalleled industry of our author, than the fact, that of *two hundred and seventy-eight species* which have been figured and described in his ornithology,* *fifty-six* of these have not been noticed by any former naturalist; and several of the latter number are so extremely rare, that the specimens, from which the figures were taken, were the only ones that he was ever enabled to obtain. The collection and discovery of these birds were the fruits of many months of unwearied research amongst forests, swamps and morasses, exposed to all the dangers, privations and fatigues incident to such an undertaking. What but a remarkable passion for the pursuit, joined with the desire of fame, could have supported a solitary individual in labors of body and mind, compared to which the bustling avocations of common life, are mere holyday activity or recreation!

Independently on that part of his work which was Mr. Wilson's particular province, *viz.* the drawing of his subjects and their histories, he was necessitated to occupy much of his time in coloring the plates: his sole resource for support being in that employment, as his duties as assistant editor of the Cyclopædia had ceased. This is a circumstance much to be regretted, as the work would have progressed more rapidly if he could have avoided that

* The whole number of birds figured is three hundred and twenty.

confining drudgery. The principal difficulty, in effect, attending this work, and that which caused its author most uneasiness, was the coloring of the plates. If this could have been done solely by himself; or, as he was obliged to seek assistance in this delicate process, if it could have been performed immediately under his eye, he would have been relieved of much anxiety;* and would have better maintained a due equanimity; his mind being daily ruffled by the negligence of his assistants; who too often, through a deplorable want of skill and taste, made disgusting caricatures of what were intended to be modest imitations of simple nature. Hence much of his precious time was spent in the irksome employment of inspecting and correcting the imperfections of others. This waste of his stated periods of labor, he felt himself constrained to supply by encroachments on those hours which Nature, tenacious of her rights, claims as her own: hours which she consecrates to rest—which she will not forego without a struggle; and which all those, who would preserve unimpaired the vigor of their mind and body, must respect. Against this intense and destructive application his friends failed not to admonish him; but to their kind regards he would reply, that “life is short, and without exertion nothing can be performed.” But the true cause of this extraordinary toil was his poverty. By the terms of agreement with his publisher, he was to furnish, at his own cost, all the drawings and literary matter for the work; and to have the whole under his control and superintendence. The publisher obligated himself to find funds for the completion of the volumes. To support the heavy expense of procuring materials, and other unavoidable expenditures, Mr. Wilson’s only resource, as has been stated, was in coloring the plates.

In the preface to the fifth volume he observes: “The publi-

* In the preface to the third volume, Mr. Wilson states the anxiety which he had suffered on account of the coloring of the plates; and of his having made an arrangement, whereby his difficulties on that score had been surmounted. This arrangement proved in the end of greater injury than benefit.

cation of an original work of this kind in this country has been attended with difficulties, great, and, it must be confessed, sometimes discouraging to the author, whose only reward *hitherto* has been the favorable opinion of his fellow-citizens, and the pleasure of the pursuit."

"Let but the generous hand of patriotism be stretched forth to assist and cherish the rising arts and literature of our country, and both will most assuredly, and that at no remote period, shoot forth, increase and flourish with a vigor, a splendor and usefulness inferior to no other on earth."

We have here an affirmation that the author had labored without reward, except what was conferred by inefficient praise; and an eloquent appeal to the *generosity* and *patriotism* of his fellow-citizens. Seven illustrious cities disputed the honor of having given *birth* to the Prince of Epic song. Philadelphia first beheld that phenomenon the American Ornithology, rising amidst her boasted opulence, to vindicate the claims of a calumniated portion of creation; and to furnish her literary pride with a subject of exultation for ages to come. Yet duty calls upon us to record a fact, which may cause our native city to feel the glow of shame. Of all her literati, her men of benevolence, taste and riches, SEVENTY only, to the period of the author's decease, had the liberality to countenance him by a subscription, more than half of whom were *tradesmen*, *artists*, and those of the middle class of society; whilst the little city of Neworleans, in the short space of *seventeen days*, furnished SIXTY subscribers to the American Ornithology!

Mr. Wilson was possessed of the nicest sense of honor. In all his dealings he was not only scrupulously just, but highly generous. His veneration for truth was exemplary. His disposition was social and affectionate. His benevolence extensive. He was remarkably temperate in eating and drinking: his love of retirement preserving him from the contaminating influence of the con-

vivial circle. And, unlike the majority of his countrymen, he abstained from the use of tobacco in every shape. But as no one is perfect, Mr. Wilson in a small degree partook of the weakness of humanity. He was of the *Genus irritabile*, and was obstinate in opinion. It ever gave him pleasure to acknowledge error when the conviction resulted from his own judgment alone, but he could not endure to be told of his mistakes. Hence his associates had to be sparing of their criticisms, through a fear of forfeiting his friendship. With almost all his friends he had occasionally, arising from a collision of opinion, some slight misunderstanding, which was soon passed over, leaving no disagreeable impression. But an act of disrespect, or wilful injury he would seldom forgive.

Such was Alexander Wilson. When the writer of this humble biography indulges in retrospection, he again finds himself in the society of that amiable individual, whose life was a series of those virtues which dignify human nature; he attends him in his wild-wood rambles, and listens to those charming observations which the magnificence of creation was wont to give birth to; he sits at his feet, and receives the instructions of one, in science, so competent to teach; he beholds him in the social circle, and notes the complacency which his presence inspired in all around. But the transition from the past to the present quickens that anguish with which his heart must be filled, who casts a melancholy look on those scenes a few months since graced with the presence of one, united to him by a conformity of taste, disposition and pursuit; and who reflects that that beloved friend can revisit them no more.

It was the intention of Mr. Wilson, on the completion of his ornithology, to publish an edition in four volumes octavo; the figures to be engraved on wood, somewhat after the manner of Bewick's British Birds; and colored with all the care that has been bestowed on the original plates. If he had lived to effect such a scheme, the public would have been put in possession of a

work of considerable elegance as respects typography and illustrations; wherein the subjects would have been arranged in systematical order; and the whole at a cost of not more than one seventh part of the quarto edition.

He likewise contemplated a work on the quadrupeds of the United States; to be printed in the same splendid style of the Ornithology; the figures to be engraved with the highest finish and by the best artists of our country. How much has science lost in the death of this ingenious and indefatigable naturalist!

Mr. Wilson was interred in the cemetery of the Swedish church, in the district of Southwark, Philadelphia. While in the enjoyment of health, he had conversed with a friend on the subject of his dissolution, and expressed a wish to be buried in some rural spot sacred to peace and solitude, where the charms of nature might invite the steps of the votary of the Muses and the lover of science, and where the birds might sing over his grave.

It has been an occasion of regret to those of his friends, to whom was confided the mournful duty of ordering his funeral, that his desire had not been made known to them, otherwise it should have been piously observed.

LIST

OF THE

WATER BIRDS OF THE UNITED STATES,

WITH THEIR GENERIC CHARACTERS, ACCORDING TO THE ARRANGEMENT OF LATHAM.

* * Those printed in italics are new species, not heretofore figured or described.

SPOONBILL.

	VOL.	PAGE
Bill long, thin, the tip dilated, orbicular, flat; nostrils small, placed near the base of the bill; tongue short, pointed; feet four toed, semipalmate.		
Roseate Spoonbill, (<i>Platalea ajaja</i>)	vii	123

HERONS.

Bill long, strong, sharp-pointed, straight, subcompressed, with a furrow from the nostrils towards the tip; nostrils linear; tongue pointed; feet four toed, connected by a membrane as far as the first joint; the middle claw of some of the species pectinated.

American Bittern, (<i>Ardea minor</i>)	viii	35
Blue Crane, or Heron, (<i>A. cærulea</i>)	vii	117
Great H. (<i>A. herodias</i>)	viii	28
Great White H. (<i>A. egretta</i>)	vii	106
Green H. (<i>A. virescens</i>)	vii	97
Least Bittern, (<i>A. exilis</i>)	viii	37

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GENERAL INDEX.

	VOL.	PAGE
<i>Louisiana Heron, (A. Ludovicianus)</i>	viii	13
<i>Night H., or Qua-bird, (A. nycticorax)</i>	vii	101
<i>Snowy H. (A. candidissima)</i>	vii	120
<i>Whooping Crane, (A. Americana)</i>	viii	20
<i>Yellow-crowned Heron, (A. violacea)</i>	viii	26

IBIS.

Bill long, subulate, roundish, subarched; face naked; tongue short, broad; jugular pouch naked; nostrils oval; feet four toed, palmate at the base.

<i>Scarlet Ibis, (Tantalus ruber)</i>	viii	41
<i>White Ibis, (T. albus)</i>	viii	43
<i>Wood Ibis, (T. loculator)</i>	viii	39

CURLEW.

Bill long, incurvated, and terminated in a blunt point; nostrils linear, longitudinal near the base; tongue short, sharp-pointed; toes connected as far as the first joint by a membrane.

<i>Long-billed Curlew, (Numenius longirostra)</i>	viii	23
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SNIPES.

Bill roundish, slender, obtuse; nostrils linear, lodged in a furrow; tongue pointed, slender; feet four toed, hind toe small.

<i>Esquimaux Curlew, (Scolopax borealis)</i>	vii	22
<i>Great Marbled Godwit (female), (S. fedoa)</i>	vii	30
<i>Red-breasted Snipe, (S. noveboracensis)</i>	vii	45
<i>Semipalmated S. (S. semipalmata)</i>	vii	27
<i>Snipe, or English S. (S. gallinago)</i>	vi	18

GENERAL INDEX.	li
	VOL. PAGE
Tell-tale Godwit, or S. (<i>S. vociferus</i>)	vii 57
Woodcock, (<i>S. minor</i>)	vi 40
Yellow-shanks S. (<i>S. flavipes</i>)	vii 55

SANDPIPERS.

Bill roundish, slender, shorter than the preceding; nostrils small, linear; tongue slender; feet four toed, the hind toe weak, and, in some, raised from the ground.

Ash-colored Sandpiper, (<i>Tringa cinerea</i>)	vii 36
<i>Bartram's S.</i> (<i>T. Bartramia</i>)	vii 63
Little S. (<i>T. pusilla</i>)	v 32
Red-backed S. (<i>T. alpina</i>)	vii 25
<i>Red-breasted S.</i> (<i>T. rufa</i>)	vii 43
Ring Plover, or S. (<i>T. hiaticula</i>)	vii 65
<i>Semipalmated S.</i> (<i>T. semipalmata</i>)	vii 131
<i>Solitary S.</i> (<i>T. solitaria</i>)	vii 53
Spotted S. (<i>T. macularia</i>)	vii 60
The Purre, (<i>T. cinclus</i>)	vii 39
Turn-stone, (<i>T. interpres</i>)	vii 32

PLOVERS.

Bill roundish, obtuse, straight; nostrils linear; feet formed for running, three toed.

Black-bellied Plover, (<i>Charadrius apricarius</i>)	vii 41
Golden P. (<i>C. pluvialis</i>)	vii 71
Kildeer P. (<i>C. vociferus</i>)	vii 73
Ringed P. (<i>C. hiaticula</i>)	v 30
Ruddy P. (<i>C. rubidus</i>)	vii 129
Sanderling P. (<i>C. calidris</i>)	vii 68
<i>Wilson's P.</i> (<i>C. Wilsonia</i>)	ix 77

GENERAL INDEX.

OYSTER-CATCHER.

Bill compressed, the tip an equal wedge; nostrils linear; tongue a third part as long as the bill; feet formed for running, three toed, the exterior joined to the middle by a strong membrane.

- | | VOL. PAGE |
|----------------------------------------------------------------|-----------|
| Pied Oyster-catcher, (<i>Hæmatopus ostralegus</i>) | viii 15 |

RAIL.

Bill thickish at the base, attenuated on the back towards the tip, compressed, a little incurved, pointed; tongue rough at the tip; body compressed; tail short; feet four toed, cleft.

- | | |
|-------------------------------------------------------|---------|
| Clapper Rail, (<i>Rallus crepitans</i>) | vii 112 |
| Common R., or Sora, (<i>R. Carolinus</i>) | vi 27 |
| Virginian R. (<i>R. Virginianus</i>) | vii 109 |

GALLINULE.

Bill convex, sloping to a point, the base of the upper mandible reaching far upon the forehead and membranaceous; nostrils oblong; body compressed; wings short, concave; tail short; feet four toed, cleft.

- | | |
|------------------------------------------------------------|-------|
| Purple Gallinule, (<i>Gallinula porphyrio</i>) | ix 67 |
|------------------------------------------------------------|-------|

PHALAROPES.

Bill straight, slender; nostrils minute; body and legs like the Sandpiper; toes furnished with scalloped membranes.

- | | |
|--------------------------------------------------------|-------|
| Gray Phalarope, (<i>Phalaropus lobata</i>) | ix 72 |
| Red P. (<i>P. hyperborea</i>) | ix 75 |

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COOT.

VOL. PAGE

Bill thick, convex, upper mandible arched over the lower at the edge, its base rising far up the forehead, lower gibbous near the tip; nostrils oblong; body compressed; wings and tail short; feet four toed, long, furnished with broad scalloped membranes.

Common Coot, (*Fulica atra*) ix 61

AVOSETS.

Bill depressed, subulate, recurved, pointed, flexible at the tip; nostrils narrow, pervious; tongue short; legs thin, flexible; feet semipalmate.

American Avoset, (*Recurvirostra Americana*) vii 126

Long-legged A. (*R. himantopus*) vii 48

FLAMINGO.

Bill naked, toothed, bent as if broken; nostrils linear; neck, legs and thighs very long; feet four toed, palmate, the membranes semicircular on the fore part; hind toe small, not connected.

Red Flamingo, (*Phoenicopterus ruber*) viii 45

AUK.

Bill toothless, short, compressed, convex, often transversely furrowed; lower mandible gibbous near the base; nostrils linear, placed parallel to the edge of the bill; feet three toed.

Little Auk, (*Alca alle*) ix 94

VOL. IX.

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DIVER.

VOL. PAGE

Bill strong, straight, pointed, the upper mandible the longer, edges of each bending inwards; nostrils generally linear, divided in the middle by a small cutaneous appendage; tongue long, pointed, serrated on each side near the base; throat toothed; thighs placed far backward; legs thin, flat, extended horizontally; feet four toed, exterior toe the longest, the back one small, joined to the interior by a thin membrane; tail short.

Great Northern Diver, or Loon, (*Colymbus glacialis*) ix 84

SKIMMER.

Bill greatly compressed, lower mandible truncate, much longer than the upper; nostrils large, pervious; legs weak; feet four toed, back toe very small; tail forked.

Black Skimmer, or Sheerwater, (*Rynchops nigra*) vii 85

TERNS.

Bill subulate, straightish, pointed, a little compressed and strong; nostrils oblong; tongue slender, pointed; wings long; tail generally forked.

Great Tern, (<i>Sterna hirundo</i>)	vii	76
Lesser T. (<i>S. minuta</i>)	vii	80
Marsh T. (<i>S. aranea</i>)	viii	143
Short-tailed T. (<i>S. plumbea</i>)	vii	83
Sooty T. (<i>S. fuliginosa</i>)	viii	145

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GULL.

VOL. PAGE

Bill strong, straight, bent downwards at the tip, lower mandible gibbous below the point; nostrils previous, broader on the fore part, and placed in the middle of the bill; tongue a little cloven.

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|----------------------------------------------------------|----|----|
| Black-headed Gull, (<i>Larus ridibundus</i>) | ix | 89 |
|----------------------------------------------------------|----|----|

PETREL.

Bill a little compressed, hooked at the point; nostrils truncate, lying on the base of the bill, for the most part contained in one tube, in some species distinct and separate; legs small, naked above the knees; three toes placed forward, back one a mere spur; wings long and strong.

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|----------------------------------------------------------|-----|----|
| Stormy Petrel, (<i>Procellaria pelagica</i>) | vii | 90 |
|----------------------------------------------------------|-----|----|

MERGANSERS.

Bill toothed, slender, cylindrical, hooked at the point, both mandibles furnished with a strong nail; nostrils small, oval, and placed in the middle of the bill; throat toothed; legs thin and flat; feet four toed.

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|------------------------------------------------------|------|-----|
| Goosander, (<i>Mergus merganser</i>) | viii | 68 |
| Ditto | ix | 131 |
| Female of ditto | viii | 71 |
| Hooded Merganser, (<i>M. cucullatus</i>) | viii | 79 |
| Red-breasted M. (<i>M. serrator</i>) | viii | 81 |
| Smew, or White Nun, (<i>M. albellus</i>) | viii | 126 |

DUCKS.

	VOL.	PAGE
Bill convex, obtuse, the edges divided into lamellæ or teeth; nostrils small, oval; tongue fringed, obtuse; three fore toes connected, the hind one solitary.		
American Widgeon, (<i>Anas Americana</i>)	viii	86
Black, or Surf Duck, (<i>A. perspicillata</i>)	viii	49
Blue-winged Teal, (<i>A. discors</i>)	viii	74
Brant, (<i>A. bernicla</i>)	viii	131
Buffel-headed Duck, (<i>A. albeola</i>)	viii	51
Canada Goose, (<i>A. Canadensis</i>)	viii	53
Canvas-back Duck, (<i>A. valisineria</i>)	viii	103
Dusky D. (<i>A. obscura</i>)	viii	141
Eider D. (<i>A. mollissima</i>)	viii	122
Female of ditto	viii	125
Gadwall, (<i>A. strepera</i>)	viii	120
Golden-eye, (<i>A. clangula</i>)	viii	62
Green-winged Teal, (<i>A. crecca</i>)	viii	101
Harlequin Duck, (<i>A. histrionica</i>)	viii	139
Long-tailed D. (<i>A. glacialis</i>)	viii	93
Female of ditto	viii	96
Mallard, (<i>A. boschas</i>)	viii	112
Pied Duck, (<i>A. Labradoria</i>)	viii	91
Pintail D. (<i>A. acuta</i>)	viii	72
Red-headed D. (<i>A. ferina?</i>)	viii	110
Ruddy D. (<i>A. rubidus</i>)	viii	128
Female of ditto	viii	130
Scaup D. (<i>A. marila</i>)	viii	84
Scoter D. (<i>A. nigra</i>)	viii	135
Shoveller, (<i>A. clypeata</i>)	viii	65
Snow Goose, (<i>A. hyperborea</i>)	viii	76
Young of ditto	viii	89

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Summer Duck, or Wood D. (<i>A. sponsa</i>)	viii	97
Tufted D. (<i>A. fuligula</i>)	viii	60
Velvet D. (<i>A. fusca</i>)	viii	137

DARTER.

Bill straight, pointed, toothed; nostrils a slit near the base; face and chin naked; neck long and slender; legs short, all the toes connected.

Black-bellied Darter, (<i>Plotus melanogaster</i>)	ix	79
Female of ditto	ix	82

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TO THE NINTH VOLUME.

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Bald Eagle	129	
Black-bellied Darter, or Snake- bird	79	
Female of ditto	82	
Black-headed Gull	89	
Black Vulture	104	
Common Coot	61	
Goosander	131	
Gray Phalarope	72	
Great-footed Hawk	120	
Great Northern Diver, or Loon	<i>Colymbus glacialis</i>	84
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Turkey Vulture, or Turkey- buzzard	96	
<i>Vultur aura</i>		
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AMERICAN ORNITHOLOGY.

COMMON COOT.

FULICA ATRA.

[Plate LXXIII.—Fig. 1.]

TURTON, I, 424.—LATH. *Gen. Syn.* III, 275. *Id. Sup.* 259. *Ind. Orn.* II, 777.—GERIN. *Orn.* V. t. 425.—*Faun. Suec.* 193.—SCOP. *Ann.* I, No. 149.—BRUN. 190.—MULLER, No. 216.—KRAM. *El.* p. 357, 1.—FRISCH, t. 208.—GEORGI REISE, p. 172.—*La Foulque, ou Morelle*, BRISS. *Orn.* VI, p. 23, 1. *pl. 2, fig. 2.*—BUFF. *Ois.* XV, p. 327. *Pl. enl.* No. 197.—*The Coot*, RAI Syn. p. 116, A. I.—WILL. *Orn.* p. 319, *pl. 59.*—ALBIN, I, *pl. 83.*—Br. Zool. No. 220, *pl. 77.* Arct. Zool. No. 416.—*Coot, or Bald Coot*, BEWICK, II, 127.—SLOANE, *Jam.* II, 320.—*Fulica Floridana*, BARTRAM, p. 296.—PEALE'S *Museum*, No. 4322.

THIS species makes its appearance in Pennsylvania about the first of October. Among the muddy flats and islands of the river Delaware, which are periodically overflowed, and which are overgrown with the reed or wild oats, and rushes, the Coots are found. They are not numerous, and are seldom seen, except their places of resort are covered with water: in that case they are generally found sitting on the fallen reed, waiting for the ebbing of the tide, which will enable them to feed. Their food consists of various aquatic plants, seeds, insects, and, it is said, small fish. The Coot has an aversion to take wing, and can seldom be sprung in its retreat at low water: for although it walks rather awkwardly, yet it contrives to skulk through the grass and reeds with great speed, the compressed form of its body, like that of the rail genus, being well adapted to the purpose. It swims remarkably well, and, when wounded, will dive like a duck. When

closely pursued in the water, it generally takes to the shore, rising with apparent reluctance like a wounded duck, and fluttering along the surface with its feet pattering on the water.* It is known in Pennsylvania by the name of the Mud-hen.

I have never yet discovered that this species breeds with us; though it is highly probable that some few may occupy the marshes of the interior, in the vicinity of the ponds and lakes, for that purpose: those retired situations being well adapted to the hatching and rearing of their young. In the southern states, particularly Carolina, they are well known; but the Floridas appear to be their principal rendezvous for the business of incubation. "The Coot," says William Bartram, "is a native of North America, from Pennsylvania to Florida. They inhabit large rivers, fresh water inlets or bays, lagoons, &c. where they swim and feed amongst the reeds and grass of the shores; particularly in the river St. Juan, in East Florida, where they are found in immense flocks. They are loquacious and noisy, talking to one another night and day; are constantly on the water, the broad lobated membranes on their toes enabling them to swim and dive like ducks."†

The Coot inhabits the shores of Sweden and Norway; appears in the spring and very rarely visits the lakes or moors.‡ Is found in Russia, China, Persia, Greenland and Siberia. It is common in France, particularly in Lorraine.§

"This species is met with in Great Britain at all seasons of the year; and it is generally believed that it does not migrate to other countries, but changes its stations, and removes in the autumn from the lesser pools or loughs, where the young have been reared, to the larger lakes, where flocks assemble in the winter. The female commonly builds her nest in a bunch of rushes, sur-

* In Carolina they are called *Flusterers*, from the noise they make in flying along the surface of the water. A voyage to Carolina by John Lawson, p. 149.

† Letter from Mr. Bartram to the editor.

‡ Amœn. Acad. iv, 591.

§ Buffon.



rounded by the water;* it is composed of a great quantity of coarse dried weeds, well matted together, and lined within with softer and finer grasses; she lays from twelve to fifteen eggs at a time, and commonly hatches twice in a season: her eggs are about the size of those of a pullet, and are of a pale brownish white color, sprinkled with numerous small dark spots, which, at the thicker end, seem as if they had run into each other, and formed bigger blotches.

"As soon as the young quit the shell, they plunge into the water, dive and swim about with great ease; but they still gather together about the mother, and take shelter under her wings, and do not entirely leave her for some time. They are at first covered with sooty-colored down, and are of a shapeless appearance; while they are in this state, and before they have learned by experience to shun danger, the Kite, Moor Buzzard, and others of the Hawk tribe make dreadful havoc among them;† and this, notwithstanding the numerous brood, may account for the scarcity of the species."‡

The Common Coot is sixteen inches in length, and twenty-eight in extent; bill one and a half inch long, white, the upper mandible *slightly notched* near the tip, and marked across with a band of chesnut, both sides of the lower mandible marked with squarish spots of like color, edged on the lower part with bright yellow or gamboge, thence to the tip pale horn color; a callous membrane is spread over the forehead, of dark chesnut; irides red; beneath the eyes a whitish spot; the head and neck are of a deep shining black, resembling sattin; back and scapulars dirty greenish olive; shoulders, breast, and wing coverts slate blue; the un-

* "A Bald Coot built her nest in Sir William Middleton's lake, at Belsay, Northumberland, among the rushes, which were afterwards loosened by the wind, and, of course, the nest was driven about, and floated upon the surface of the water, in every direction; notwithstanding which, the female continued to sit as usual, and brought out her young upon her moveable habitation."

† "The Pike is also the indiscriminate devourer of the young of all these water birds."

‡ Bewick's British Birds, vol. ii, p. 129.

der parts are hoary; vent black; beneath the tail pure white; primaries and secondaries slate, the former tipped with black, the latter with white, which does not appear when the wing is closed; outer edges of the wings white; legs and toes yellowish green, the scalloped membrane of the latter lead color; middle toe, including the claw, three inches and three quarters long.

The bird from which the foregoing description was taken, was shot in the Delaware, below Philadelphia, the 29th of October, 1813. It was an old male, an uncommonly fine specimen, and weighed twenty-three ounces avoirdupois. It is deposited in Peale's Museum.

The young birds differ somewhat in their plumage, that of the head and neck being of a brownish black; that of the breast and shoulders pale ash; the throat gray or mottled; the bill bluish white; and the membrane on the forehead considerably smaller.

I have never been able to procure an old female, all those which I have seen being young ones. They very much resemble the young males; all the difference which was perceptible was as follows: breast and shoulders cinereous; markings on the bill less; upper parts of the head, in some specimens, mottled; and being less in size.

The lower parts of these birds are clothed with a thick down, and, particularly between the thighs, covered with close fine feathers. The thighs are placed far behind, are fleshy, strong and bare above the knees.

Sloane says that "the trachea arteria of the Coot is branched into two, just under the base of the heart, and is compressed as that of the *Ardea cærulea nigra*." The gizzard resembles a hen's, and is remarkably large and muscular. That of the bird which has been described was filled with sand, gravel, shells, and the remains of aquatic plants.

Buffon describes the mode of shooting Coots in France, par-

ticularly in Lorraine, on the great pools of Tiaucourt and of Indre; hence we are led to suppose that they are esteemed as an article of food. But with us who are enabled, by the abundance and variety of game, to indulge in greater luxuries in that season when the Coots visit us, they are considered as of no account, and are seldom eaten.

The bird called Cinereous Coot by Turton and Latham, *F. Americana*, is probably the young of the present species.

All the European Ornithologists represent the membrane on the forehead of the Coot as white, except in the breeding season, when it is said to change its color to pale red. This circumstance would induce one to suppose that our Coot is a different species from the European, which I have never had the satisfaction to behold; and indeed I am much of that opinion.

It is a very rare occurrence that the Coot is seen in the vicinity of Philadelphia in the spring or summer. The nineteenth of March, 1814, I had the satisfaction of being presented with one, a female, which was shot in the Schuylkill, at Gray's ferry. I could see no difference in its plumage and markings from those of the full grown male, except the head and neck not being of so deep a black. The membrane on the forehead was not more than half the size of that of the male specimen, described above, and it was of the same color, viz. *dark chesnut*. All the birds which I have ever seen had this appendage of the same color.

In Lewis and Clark's long-expected History of their expedition, which has been just published, mention is made of a bird which is common on the Columbia; is said to be very noisy, to have a sharp, shrill whistle, and to associate in large flocks; it is called the *Black Duck*.* This is doubtless a species of Coot, but whe-

* History of the Expedition, vol. ii, p. 194. Under date of November 30th, 1805, they say: "The hunters brought in a few *black ducks* of a species common in the United States, living in large flocks, and feeding on grass: they are distinguished by a sharp white beak, toes separated, and by having no *craw*."

ther or no different from ours cannot be ascertained. How much is it to be regretted, that in an expedition of discovery, planned and fitted out by an enlightened government, furnished with every means for safety, subsistence and research, that not one naturalist, not one draftsman should have been sent, to observe and perpetuate the infinite variety of natural productions, many of which are entirely unknown to the community of science, which that extensive tour must have revealed!

The Coot leaves us in November, for the southward.

The foregoing was prepared for the press, when the editor, in one of his shooting excursions on the Delaware, had the good fortune to kill a full plumaged female Coot. This was on the twentieth of April. It was swimming at the edge of a cripple or thicket of alder bushes, busily engaged in picking something from the surface of the water, and while thus employed it turned frequently. It differed in no respect from the female above mentioned. The membrane on its forehead was very small, and edged on the fore part with gamboge. Its eggs were of the size of partridge shot. And on the thirteenth of May another fine female specimen was presented to him which agreed with those described, with the exception of the membrane on the forehead being nearly as large and prominent as that of the male. From the circumstance of the eggs of all these birds being very small, it is probable that the Coots do not breed until July.

PURPLE GALLINULE.

GALLINULA PORPHYRIO.

[Plate LXXIII.—Fig. 2.]

Gallinula porphyrio, LATHAM, *Ind. Orn.* p. 768. *Idem*, III, pt. 1, p. 254. *Id. 2d Sup.* 326.—GERIN, *Orn.* V, t. 485.—*Fulica porphyrio*, TURT. *Syst.* I, 422.—SCOP. *Ann.* I, No. 152.—*La Poule Sultane*, BRISS. *Orn.* V, p. 522, I, pl. 42, fig. 1.—BUFF. *Ois.* XV, p. 302. *Pl. enl.* No. 810.—RAIL, *Syn.* p. 416. 13, 14.—WILL. *Orn.* p. 318.—*Purple Water Hen*, EDWARDS, *pl.* 87.—ALBIN, III, *pl.* 11.—PEALE'S *Museum*, No. 4294.

THIS splendid and celebrated bird is a native of the southern parts of the continent of America; and is occasionally found within the limits of the United States. But we have to regret that it is not in our power to furnish any additional particulars to its history, already detailed in the works of the European Naturalists. Travellers in our section of the globe have hitherto been too neglectful of that beautiful, interesting and useful portion of animated nature, the Birds. Content with wandering over an extent of country, noting merely the common-place occurrences of life, the voyager returns to his friends, and unfolds to their attentive ears the history of his adventures. His book is published, read, and thrown aside with the ephemeral sheets, the useful but soon forgotten newspapers. If the natural history of only one single acre were to be accurately recorded by each traveller, mankind would receive more real benefit and satisfaction from such productions, than from cart-loads of itineraries, descriptive of scenes and manners, which, from being long familiar to us, fail to interest, or disgust by the frequency of their repetition. Curiosity is an active principle, and we could sincerely wish every traveller to be possessed of an abundant share of it. Not that impertinent desire to pry into the affairs of families or communities which distinguishes

some individuals; but that laudable thirst for knowledge, which leads one over mountains and precipices, through forests, valleys and thickets, intent on exploring the inexhaustible treasures of Nature.

We have been insensibly led into this train of reflections, in consequence of our chagrin in not finding any account of the subject of this article in the pages of the American traveller, historian or naturalist. To the Europeans then we are compelled to resort, happy that, with their assistance, we shall be enabled to throw some light on the history of a stranger, whose native haunts we have never yet had the good fortune to explore.

"This bird," says Latham, "is more or less common in all the warmer parts of the globe. On the coasts of Barbary they abound, as well as in some of the islands of the Mediterranean. In Sicily they are bred in plenty, and kept for their beauty; but whether indigenous there we are not certain. It is frequently met with in various parts of the south of Russia, and western parts of Siberia, among reedy places; and in the neighbourhood of the Caspian sea not uncommon: but in the cultivated rice grounds of Ghilan in Persia, in great plenty, and in high plumage. The female makes her nest among the reeds, in the middle of March; lays three or four eggs,* and sits from three to four weeks. That it is common in China the paper-hangings thence will every where testify. It is also met with in the East Indies, the islands of Java, Madagascar, and many others. Our late navigators saw them at Tongataboot in vast numbers, as well as in the island of Tanna, and other parts. It is also common in the southern parts of America.

"In respect to its manners, it is a very docile bird, being easily tamed, and feeding with the poultry, scratching the ground

* Buffon says that the pair which the Marquis de Nesle introduced into France laid six round, white eggs, about the size of a demi-billiard.

† Forst. voy. i, 448. ii, 358. Cook's last voy. i, 239. Am. ed.

with the foot as the Cock and Hen. It will feed on many things, such as fruits, roots of plants and grain; but will eat fish with avidity, dipping them into the water before it swallows them: will frequently stand on one leg, and lift the food to its mouth with the other, like a Parrot. The flesh is said to be exquisite in taste."

"The moderns," says Buffon, "have given the name of Sultana Hen to a bird famous among the ancients, under the name of Porphyrion. We have frequently had occasion to remark the justness of the denominations bestowed by the Greeks, which generally allude to the distinctive characters, and are therefore superior to the terms hastily adopted in our languages from superficial or inaccurate views. The present is an instance; as this bird seemed to bear some resemblance to the gallinaceous tribe, it got the name of Hen; but as, at the same time, it differed widely, and excelled by its beauty and port, it received the epithet of Sultana. But the term Porphyrion, indicating the red or purple tint of its bill and feet, was more just and characteristic: and should we not rebuild the fine ruins of learned antiquity, and restore to nature those brilliant images, and those faithful portraits from the delicate pencil of the Greeks, ever awake to her beauties and her animation?

"Both the Greeks and Romans, notwithstanding their voracious luxury, abstained from eating the Porphyrion. They brought it from Lybia,* from Comagene, and from the Balearic islands,† to be fed,‡ and to be placed in their palaces and temples, where it was left at liberty as a guest,§ whose noble aspect, whose gentle disposition, and whose elegant plumage, merited such honors.

"Scarcely any bird has more beautiful colors; the blue of its plumage is soft and glossy, embellished with brilliant reflec-

* "Alexander the Myndian, in Athenæus, reckons the Porphyrion in the number of Lybian birds, and relates that it was sacred to the gods in that country. According to Diodorus Siculus, Porphyrions were brought from the heart of Syria, with other kinds of birds distinguished by their rich colors."

† Pliny, lib. x, 46. 49.

‡ Belon.

§ Ælian, lib. iii, 41.

tions; its long feet, and the plate from the top of its head to the root of its bill, are of a fine red; and a tuft of white feathers under the tail heightens the lustre of its charming garb. Except that it is rather smaller, the female differs not from the male, which exceeds the partridge, but is inferior to a domestic hen. The Marquis de Nesle brought a pair from Sicily, where they are known under the name of *Gallofagiani*; they are found on the lake Lentini, above Catana, and are sold for a moderate price in that city, as well as in Syracuse and the adjacent towns. They appear alive in the public places, and plant themselves beside the sellers of vegetables and fruits to pick up the refuse: and this beautiful bird, which the Romans lodged in their temples, now experiences the decline of Italy."

The length of the Purple Gallinule is fourteen inches; its bill is an inch and a quarter long, red, yellow at the tips; nostril small, oblong, and near the centre of the bill; irides tawny; the naked front and crown are red; the head, part of the neck, throat and breast are of a rich violet purple; the back and scapulars brownish green; rump, tail and its coverts of a duller brownish green; the sides of the neck ultramarine; wings the same, tinged with green; the inner webs of the quill feathers and tail dusky brown; upper lining and side lining of the wings, under the spurious wing, rich light blue; the belly, thighs, and for an inch behind, dull purplish black; the vent pure white; tail rounded; thighs, legs and feet red; span of the foot five inches; hind toe and claws long.

It is somewhat remarkable that Turton, in his translation of the *Systema Naturæ*, should have perpetuated the error of arranging the Gallinules with the Coots, under the generical appellation of *Fulica*, to which they have but little resemblance in their habits, and none in the conformation of their feet. As he professed to have been assisted by the works of Dr. Latham, one would suppose that the classification of the latter, especially in this instance, would have been adopted.

In Mr. Peale's collection there is a Gallinule which resembles the above in every respect, except its being considerably smaller.

The bird from which our drawing was taken, came from the state of Georgia, and is deposited in Peale's Museum. It is reduced, as well as the rest of the figures in the same plate, to one half the size of life.

Since writing the above, I have been informed by Mr. Alexander Rider, the painter, who accompanied the late Mr. Enslen in his botanical researches through the United States, that they observed the Purple Gallinule in a thick swamp, a short distance from Savannah, Georgia. It was very vigilant and shy, and was shot with much difficulty. It is very probable that it breeds there, as the nature of the swamp favors concealment, of which this bird appears to be fond.

Mr. Abbot, of Georgia, likewise informs me that this species frequents the rice fields and marshes in the lower parts of the state; it is rare, he having met with only three specimens; he has no doubt that it breeds there. He says that when the bird is living, the naked crown is of a *bright blue*, and the legs *yellow ochre*. We were necessitated to take our description, and to color our figure, from the stuffed specimen in Peale's Museum, and it is possible that we may have been in error with respect to those parts. In Mr. Wilson's drawing they were colored as we have described them.

GRAY PHALAROPE.

PHALAROPUS LOBATA.

[Plate LXXIII.—Fig. 3.]

Phalaropus lobata, LATHAM, *Ind. Orn.* p. 776. *Id. III*, pt. 1, p. 272.—*Tringa lobata*, TURT. *Syst. I*, 406.—MULLER, No. 195.—*Faun. Suec.* 179. *Faun. Grœnl.* No. 75.—*Le Phalarope*, BRISS. *Orn. VI*, p. 18, 1.—*Le Phalarope à festons dentelés*, BUFF. *Ois. XV*, p. 349.—*Grey coot-footed Tringa*, EDWARDS, pl. 308.—BEWICK, II, p. 132.—BARTRAM, p. 294.—*Br. Zool. II*, No. 218. *Arct. Zool. II*, No. 412.

OF this species only one specimen was ever seen by Mr. Wilson, and that was preserved in Trowbridge's Museum, at Albany, in the state of Newyork. In referring to Mr. Wilson's journal I found an account of the bird, there called a Tringa, written with a lead pencil, but so scrawled and obscured that parts of the writing were not legible. I wrote to Mr. Trowbridge, soliciting a particular description, but no answer has been returned. From the drawing, which is imperfectly colored, and the description which I have been enabled to decipher, I have concluded that this species is the Gray Phalarope of Turton. It is worthy of remark that the ornithologists of Europe have differed somewhat in their account of this bird, as well as of that which follows; and we cannot reconcile our descriptions with theirs. This is owing, we presume, to the scarcity of the species, which has operated against their obtaining subjects recently killed, and has compelled them to have recourse to old or imperfect specimens of the Museums.

In the grand and wonderful chain of animated nature, the Phalaropes constitute one of the links between the Waders and the Web-footed tribes, having the form of the Sandpiper with the habits of some of the Ducks: the scalloped membranes on their toes enabling them to swim with facility. They do not appear to

be fond of the neighborhood of the ocean, and are generally found in the interior, about the lakes, ponds and streams of fresh water, where they delight to linger, swimming near the margin in search of seeds and insects. They go in pairs, and we cannot learn that they are any where numerous. These circumstances are sufficient to authorize their removal from a tribe, to which they have little resemblance, except in their general appearance. Edwards was the first naturalist who introduced them to the world; and altho he seems to have been convinced that they ought to constitute a genus of themselves, yet he contented himself with arranging them with the *Tringæ*, a classification certainly neither scientific nor natural. Turton has fallen into the same error, which Latham and Pennant have judiciously avoided; and in their arrangement, so agreeable to our sentiments of the obvious discriminations of Nature, we heartily concur.

The bill of this species is black, slender, straight, and one inch and three quarters in length; lores, front, crown, hind head and thence to the back very pale ash, nearly white; from the anterior angle of the eye a curving stripe of black descends along the neck for an inch or more; thence to the shoulders dark reddish brown, which also tinges the white on the side of the neck next it; under parts white; above dark olive; wings and legs black; the scalloped membranes on the toes finely serrated on their edges.
Size of the Turn-stone.

The above description I am convinced is imperfect; but as I have not an opportunity of seeing the bird, no better can be obtained.

Pennant says that the Gray Phalarope inhabits Scandinavia, Iceland and Greenland: in the last lives on the frozen side, near the great lakes; quits the country before winter; is seen on the full seas in April and September, in the course of its migration. It is frequent in all Siberia, about the lakes and rivers, especially

in autumn; probably in its migration from the Arctic flats; it was also met with among the ice between Asia and America.

The editor has been at considerable pains this spring to procure specimens and information of the two Phalaropes which are figured and described in this volume, but he is sorry to declare that his endeavors have been unsuccessful. Though he explored our ponds and shores many times with his gun, and made frequent inquiries of sportsmen, yet he neither saw these birds nor heard of them; and he has reason to believe that they seldom visit this part of the United States.

RED PHALAROPE.

PHALAROPUS HYPERBOREA.

[Plate LXXIII.—Fig. 4.]

Phalaropus hyperboreus, LATHAM, *Ind. Orn.* p. 775. *Idem*, III, pt. 1, p. 270.—*Br. Zool.* II, No. 219. *Arct. Zool.* No. 413.—*Tringa fulicaria*, FAUN. SUCC. No. 179. FAUN. GRÆNL. No. 76.—BRUNNICH, No. 172.—MULLER, No. 196.—*Tringa hyperborea*, TURT. *Syst.* 1, 407.—*Le Phalarope rouge*, BUFF. *Ois.* XV, p. 348. *Pl. enl.* 766.—*Le Phalarope cendré*, BRISS. *Orn.* VI, p. 15, 2.—RAII, *Syn.* p. 132, A. 7.—*Small cloven-footed Gull*, WILL. *Orn.* p. 355.—*Coot-footed Tringa*, EDW. 142, 143.—*Red Coot-footed Tringa*, BARTRAM, 294.—BEWICK, II, 131.—PEALE'S *Museum*, No. 4088.

THIS species measures nine inches in length, and fifteen in breadth; the front and crown are black, barred transversely with lines of white; bill orange, an inch long, broad above, black towards the tip; throat, sides of the neck, and lower parts white, thickly and irregularly barred with curving dashes of reddish chocolate; the upper parts are of a deep slate color, streaked with brownish yellow and black; the black scapulars broadly edged with brownish yellow; tail plain pale olive; middle of the tail coverts black, sides bright brownish yellow; rump and wings dark slate; the primaries are nearly black, and crossed with white, as usual, below their coverts; greater wing coverts broadly tipped with white, forming a large band; vent white, those feathers immediately next the tail reddish chocolate; legs black on the outside, yellowish within; hind toe small and partly pinnate.

The Red Phalarope is a very rare bird in Pennsylvania; and, as far as we can learn, is but seldom met with in any part of the union. It is said that they come into Hudson's Bay the beginning of June, and lay four eggs, about the middle of that month, on a dry spot; the young fly in August, and they depart to the southward in September. Whether or no they breed within the terri-

tory of the United States we cannot determine; but it is probable they do, as three were seen in a pond below Philadelphia, in the latter part of May, 1812, one of which was shot, and presented to the editor, who transferred it to Mr. Peale. In consequence of its being in a high state of putridity when received, it was preserved with considerable difficulty, and the sex could not be ascertained. Our figure and description were from this specimen. The person who shot this bird had never seen one of the species before, and was particularly struck with its singular manners. He described it as sitting on the water, dipping in its bill very often, as if feeding, and turning frequently round.

Pennant informs us that the Red Phalarope is found in Scandinavia; is common about the Caspian sea and the lakes and rivers adjacent, during spring; but does not extend to the farther part of Siberia. It visits Greenland in April, and departs in September.

WILSON'S PLOVER.

CHARADRIUS WILSONIA.

[Plate LXXIII.—Fig. 5.]

PEALE'S *Museum*, No. 4159, male—4160, female.

OF this neat and prettily marked species I can find no account, and have concluded that it has hitherto escaped the eye of the naturalist. The bird of which the figure in the plate is a correct resemblance, was shot the thirteenth of May, 1813, on the shore of Cape-Island, Newjersey, by my ever-regretted friend; and I have honored it with his name. It was a male, and was accompanied by another of the same sex and a female, all of which were fortunately obtained.

This bird very much resembles the Ring Plover, except in the length and color of the bill, its size, and in wanting the yellow eyelids. The males and females of this species differ in their markings, but the Ring Plovers nearly agree. We conversed with some gunners of Cape May, who asserted that they were acquainted with these birds, and that they sometimes made their appearance in flocks of considerable numbers; others had no knowledge of them. That the species is rare we were well convinced, as we had diligently explored the shore of a considerable part of Cape May, in the vicinity of Great Egg-harbor, many times at different seasons, and had never seen them before. How long they remain on our coast, and where they winter, we are unable to say. From the circumstance of the oviduct of the female being greatly enlarged and containing an egg half grown, apparently within a week of being ready for exclusion, we concluded that they breed

there. Their favorite places of resort appear to be the dry sand flats on the sea shore. They utter an agreeable piping note.

This species is seven inches and three quarters in length, and fifteen and a half in extent; the bill is black, stout, and an inch long, the upper mandible projecting considerably over the lower; front white passing on each side to the middle of the eye above, and bounded by a band of black of equal breadth; lores black; eyelids white; eye large and dark; from the middle of the eye backwards the stripe of white becomes duller, and extends for half an inch; the crown, hind head and auriculars are drab olive; the chin, throat and sides of the neck for an inch pure white, passing quite round the neck, and narrowing to a point behind; the upper breast below this is marked with a broad band of jet black; the rest of the lower parts pure white; upper parts pale olive drab; along the edges of the auriculars and hind head, the plumage, where it joins the white, is stained with raw terra sienna; all the plumage is darkest in the centre and darker shafted; the tertials are fully longer than the primaries, the latter brownish black, the shafts and edges of some of the middle ones white; secondaries and greater coverts slightly tipped with white; the legs are of a pale flesh color; toes bordered with a narrow edge, the outer and middle ones connected as far as the first joint by a membrane; claws and ends of the toes black; the tail is even, a very little longer than the wings, and of a blackish olive color, with the exception of the two exterior feathers which are whitish, but generally the two middle ones only are seen.

The female differs in having no black on the forehead, lores, or breast, those parts being pale olive.



Drawn from Nature by J. Wilson.
J. Black-bellied Darter.

4. Female D.
2. Great Northern Diver.

3. Little Auk.
5. Black-headed Gull.

Engraved by J. G. Whitehead.

BLACK-BELLIED DARTER, OR SNAKE-BIRD.

PLOTUS MELANOGASTER.[Plate LXXIV.—Fig. 1.—*Male.*.]

SALERNE, *Orn.* p. 375.—WILL. *Orn.* p. 250.—TURT. *Syst.* 1, 351.—LATH. *Gen. Syn.* pt. 2, p. 624.
L'Anhinga, BUFF. *Ois.* XVI, p. 253. *Anhinga de Cayenne*, Pl. enl. No. 959.—*Anhinga melanogaster*, Zool. Ind. p. 22, pl. 12.—*Colymbus colubrinus*, *Snake-bird*, BARTRAM, p. 132. 295.—PEALE'S
Museum, No. 3188, *Male*.

THE Black-bellied Darter is three feet three inches in length; the bill is three inches and three quarters long, rather slender, very sharp pointed, and armed with numerous sharp teeth towards the tip, for the securing of its prey, it is black above and yellow below; no external nostrils are visible; the bare space around the eye, and the pouch under the chin are also yellow; the slit of the mouth extends beyond the eye; irides vivid red; the head, neck, and whole lower parts are black, glossed with dark green; the side of the neck from the eye backwards, for more than half its length, is marked by a strip of brownish white, consisting of long hair-like tufts of plumage, extending an inch beyond the common surface, resembling the hair of callow young; there are a few small tufts on the crown; the whole upper parts are black, marked in a very singular and beautiful manner with small oval spots, and long pointed streaks, of a limy white, which has the gloss of silver in some lights; the middle of the back, primaries, secondaries, rump and tail coverts are plain glossy black; on the upper part of the back, the white is in very small oval spots, lengthening as they approach the scapulars and tertials, on the latter they extend the whole length of the feathers, running down the centre; these are black shafted; the wings are long and pointed; lesser

coverts marked on every feather with an oval, or spade-shaped spot of white; greater coverts nearly all of a limy white; the tail is long, rounding, and exceedingly stiff, consisting of twelve broad feathers, the exterior vanes of the four middle ones curiously crimped; the whole black, and broadly tipped with dirty brownish white; the thighs are black; legs scarcely an inch and a half long; feet webbed, all the four toes united by the membrane, which is of uncommon breadth, and must give the bird great velocity when diving or swimming; the exterior toe, which is the longest, is three inches long; claws horn color, strong and crooked, inner side of the middle one pectinated; legs and feet yellow. The whole plumage is of extraordinary stiffness and elasticity; that of the neck and breast thick, soft and shining. The position of these birds when standing is like that of the Gannets.

Of this extraordinary species we can give little more than accurate descriptions, and tolerably good portraits, which were taken from two fine specimens, admirably set up and preserved in the Museum of Mr. Peale. The Snake-bird is an inhabitant of the Carolinas, Georgia and the Floridas; and is common in Brasil, Cayenne, Senegal, Ceylon and Java. It seems to have derived its name from the singular form of its head and neck, which at a distance very much resemble some species of serpents. In those countries where noxious animals abound, we may readily conceive that the appearance of this bird, extending its long neck through the foliage of a tree, would tend to startle the wary traveller, whose imagination had portrayed objects of danger lurking in every thicket. It is said to build its nest on a tree; but of its habits during the season of incubation, the number and color of its eggs, or the rearing of its young, we are ignorant. Formerly the Darter was considered by voyagers as an anomalous production, a monster partaking of the nature of the Snake and the Duck; and in some ancient charts which we have seen, it is delineated in all the extravagance of fiction.

My excellent friend, Mr. William Bartram, gives the following account of the subject of our history :

“ Here is in this river,* and in the waters all over Florida, a very curious and handsome bird, the people call them Snake-birds; I think I have seen paintings of them on the Chinese screens and other Indian pictures ; they seem to be a species of Colymbus, but far more beautiful and delicately formed than any other that I have ever seen. They delight to sit in little peaceable communities, on the dry limbs of trees, hanging over the still waters, with their wings and tails expanded, I suppose to cool and air themselves, when at the same time they behold their images in the watery mirror. At such times when we approach them they drop off the limbs into the water as if dead, and for a minute or two are not to be seen ; when on a sudden, at a great distance, their long slender head and neck appear, like a snake rising erect out of the water ; and no other part of them is to be seen when swimming, except sometimes the tip end of their tail. In the heat of the day they are seen in great numbers, sailing very high in the air over lakes and rivers.

“ I doubt not but if this bird had been an inhabitant of the Tiber in Ovid’s days, it would have furnished him with a subject for some beautiful and entertaining metamorphoses. I believe they feed entirely on fish, for their flesh smells and tastes intolerably strong of it: it is scarcely to be eaten, unless one is constrained by insufferable hunger. They inhabit the waters of Cape Fear river, and, southerly, East and West Florida.”*

* The river St. Juan, East Florida.

† Bartram’s Travels, p. 132.—MS. in the possession of the editor.

FEMALE BLACK-BELLIED DARTER.

[Plate LXXIV.—Fig. 2.]

White-bellied Darter? LATH. Gen. Syn. VI, p. 622, 1. Ind. Orn. p. 895.
PEALE's Museum, No. 3189, Female.

THE female Darter measures three feet five inches in length; and differs in having the neck before of a roan color or iron gray, the breast the same but lighter and tinged with pale chesnut; the belly as in the male; where the iron gray joins the black on the belly, there is a narrow band of chesnut; upper head and back of the neck dark sooty brown, streaked with blackish; cheeks and chin pale yellow ochre; in every other respect the same as the male, except in having only a few slight tufts of hair along the side of the neck; the tail is twelve inches long to its insertion, generally spread out like a fan, and crimped like the other on the outer vanes of the two middle feathers only.

Naturalists describe a bird, of this family, which they call the White-bellied Darter, *P. anhinga*. We know of but one species of Plotus found within the United States, and suspect that the female above described is the White-bellied Darter of Latham and others. For the purpose of ascertaining the fact, we wrote to an experienced naturalist residing in Georgia, but through some unfortunate cause no answer has been received. It is so many years since our venerable friend, Mr. Bartram, travelled in those regions where the Darters are common, that he has lost all recollection of them, except what relates to their general appearance. We must therefore content ourselves with our imperfect knowledge of this singular species, until some favorable occurrence shall enable us to form a correct opinion.

Since the above has been written, the editor has had the sa-

tisfaction of receiving from Mr. John Abbot, of Georgia, a valuable communication relative to this bird and some others; for which favor he offers his sincere acknowledgment.

Mr. Abbot agrees with us in opinion, that the *P. anhinga* is the female of this species. He says: "Both the Darters I esteem as but one species. I have now by me a drawing of the male, or Black-bellied, only; but have had specimens of both at the same time. I remember that the upper parts of the female were similar to those of the male, except that the color and markings were not so pure and distinct; length thirty-six inches, extent forty-six. These birds frequent the ponds, rivers and creeks during the summer; build in the trees of the swamps, and those of the islands in the ponds; they construct their nests of sticks; eggs of a sky blue color. I inspected a nest, which was not very large, it contained two eggs and six young ones, the latter varying much in size; they will occupy the same tree for a series of years. They commonly sit on a stump, which rises out of the water, in the mornings of the spring, and spread their wings to the sun, from which circumstance they have obtained the appellation of Sun-birds. They are difficult to be shot when swimming, in consequence of only their heads being above the water."

GREAT NORTHERN DIVER, OR LOON.

COLYMBUS GLACIALIS.

[Plate LXXIV.—Fig. 3.]

PENNANT, *Br. Zool.* 237. *Arct. Zool.* 439.—*Le grand Plongeon tacheté*, BRISS. *Orn.* VI, 120. *tab.* 2,
fig. 1.—*Il'Imbrim, ou grand Plongeon de la Mer du Nord*, DE BUFF. *Ois.* XV, p. 461. *Pl. enl.*
No. 952.—TURT. *Syst.* I, 356.—LATH. *Gen. Syn.* III, *pt. 2*, p. 337.—*Colymbus maximus caudatus*,
RAII, *Syn.* p. 125, A. 4.—*Greatest speckled Diver, or Loon*, WILLUGHBY, *Orn.* p. 341.—*Great speckled Diver*, BARTRAM, 295.—ALBIN, III, *pl.* 93.—BEWICK's *British Birds*, II, *p.* 168.—PEALE's
Museum, *No.* 3262, *male and young*.—3263, *female*.

THIS bird in Pennsylvania is migratory. In the autumn it makes its appearance with the various feathered tribes that frequent our waters; and when the streams are obstructed with ice, it departs for the southern states.* In the months of March and April it is again seen; and after lingering awhile, it leaves us for the purpose of breeding. The Loons are found along the coast as well as in the interior; but in the summer they retire to the fresh water lakes and ponds. We have never heard that they breed in Pennsylvania; but it is said they do in Missibisci pond, near Boston, Massachusetts. The female lays two large brownish eggs. They are commonly seen in pairs, and procure their food, which is fish, in the deepest water of our rivers, diving after it, and continuing under for a length of time. Being a wary bird, it is seldom they are killed, eluding their pursuers by their astonishing faculty of diving. They seem averse from flying, and are but seldom seen on the wing. They are never eaten.

The Loon is said to be restless before a storm; and an experienced master of a coasting vessel informed me that he al-

* The Loon is said to winter in the Chesapeake bay.

ways knew when a tempest was approaching by the cry of this bird, which is very shrill, and may be heard at the distance of a mile or more.

This species seldom visits the shores of Britain, except in very severe winters; but it is met with in the north of Europe, and spreads along the arctic coast as far as the mouth of the river Ob, in the dominions of Russia. It is found about Spitzbergen, Iceland, and Hudson's Bay. Makes its nest, in the more northern regions, on the little isles of fresh water lakes: every pair keep a lake to themselves. It sees well, flies very high, and, darting obliquely, falls secure into its nest. Appears in Greenland in April or the beginning of May; and goes away in September or October, on the first fall of snow.* It is also found at Nootka Sound† and Kamtschatka.

The Barabinzians, a nation situated between the river Ob and the Irtisch, in the Russian dominions, tan the breasts of this and other water fowl, whose skins they prepare in such a manner as to preserve the down upon them; and, sewing a number of these together they sell them to make pelises, caps, &c. Garments made of these are very warm, never imbibing the least moisture; and are more lasting than could be imagined.‡

The natives of Greenland use the skins for clothing; and the Indians about Hudson's Bay adorn their heads with circlets of their feathers.§

Lewis and Clark's party, at the mouth of the Columbia, saw robes made of the skins of Loons;** and abundance of these birds during the time that they wintered at Fort Clatsop on that river.††

The Laplanders, according to Regnard, cover their heads with a cap made of the skin of a *Loom* (Loon), which word signifies in their language *lame*, because the bird cannot walk well.

* Pennant. † Cook's last voy. ii, p. 237, Am. ed. ‡ Latham. § Arctic Zoology.

** Gass's Journal. †† History of the Expedition, vol. ii, p. 189.

They place it on their head in such a manner, that the bird's head falls over their brow, and its wings cover their ears.

"Northern Divers," says Hearne, "tho' common in Hudson's Bay, are by no means plentiful; they are seldom found near the coast, but more frequently in fresh water lakes, and usually in pairs. They build their nests at the edge of small islands, or the margins of lakes or ponds; they lay only two eggs, and it is very common to find only one pair and their young in one sheet of water: a great proof of their aversion to society. They are known in Hudson's Bay by the name of Loons."*

The Great Northern Diver measures two feet ten inches from the tip of the bill to the end of the tail, and four feet five inches in breadth; the bill is strong, of a glossy black, and four inches and three quarters long to the corner of the mouth; nostril pervious; the edges of the bill do not fit exactly into each other, and are ragged, the lower mandible separates into two branches, which are united by a thin elastic membrane, and are easily moveable horizontally or receding from each other, so as to form a wider gap to facilitate the swallowing of large fish; irides dark blood red; the head and half of the length of the neck are of a deep black with a green gloss, and purple reflections; this is succeeded by a band consisting of interrupted white and black lateral stripes, which encompasses the neck, and tapers to a point on its fore part, without joining—this band measures about an inch and a half in its widest part, and to appearance is not continuous on the back part of the neck, being concealed by some thick, overhanging, black feathers, but on separating the latter the band becomes visible: the feathers which form these narrow stripes are white, streaked down their centre with black, and, what is a remarkable peculiarity, their webs project above the common surface; below this is a broad band of dark glossy green and violet, which

* Hearne's Journey, p. 429, quarto.

is blended behind with the plumage of the back; the lower part of the neck, and the sides of the breast are ribbed in the same manner as the band above; below the chin a few stripes of the same; the whole of the upper parts are of a deep black, slightly glossed with green, and thickly spotted with white, in regular transverse or semicircular rows, two spots on the end of each feather—those on the upper part of the back, shoulders, rump and tail coverts small and roundish, those on the centre of the back square and larger, those on the scapulars are the largest, and of an oblong square shape; the wing feathers and tail are plain brown black, the latter composed of twenty feathers, and is very short and rounded; the lower parts are pure white, a slight dusky line across the vent; the scapulars descend over the wing, and the belly feathers ascend so as to meet them, by which means every part of the wing is concealed, except towards the tip, this accommodation is to prevent its retarding the bird in diving; the outside of the legs and feet is black, inside pale blue; the leg is four inches in length, and the foot measures, along the exterior toe to the tip of its claw, four inches and three quarters; both legs and feet are marked with five-sided polygons.

The female Diver is somewhat less than the male; the bill is yellowish; crown, back part of the neck, and whole upper parts pale brown; the plumage of part of the back and scapulars is tipped with pale ash; the throat, lower side of the neck, and whole under parts are white, but not so pure as that of the male, having a yellowish tinge; the quill feathers dark brown. She has no appearance of bands on her neck, or of spots on her body.

The young males do not obtain their perfect plumage until the second or third year. One which we have seen, and which was conjectured to be a yearling, had some resemblance to the female, with the exception of its upper parts being of a darker and purer brown or mouse color, and its under parts of a more delicate white; it had likewise a few spots on the back and scapulars;

but none of those markings on the neck which distinguish the full grown male.

The conformation of the ribs and bones of this species is remarkable, and merits particular examination.

In the account which the European ornithologists give of their Northern Diver, we presume there is some inaccuracy. They say it measures three feet six inches in length, and four feet eight in breadth; and weighs *sixteen pounds*. If this be a correct statement, it would lead to the surmise that our Diver is a different species; for of several specimens which we have examined, the best and largest has been described for this work, the admeasurement of which bird comes considerably short of that of the European; the weight we neglected to ascertain. The common Wild Goose of our country, *A. Canadensis*, when in good condition will seldom weigh more than twelve pounds. In order to determine this point, we personally exerted ourselves, and commissioned some of our friends, to procure a good specimen of the Loon during the past season, but without success.

BLACK-HEADED GULL.

LARUS RIDIBUNDUS.

[Plate LXXIV.—Fig. 4.]

LINN. *Syst.* 225.—*La Mouette rieuse*, DE BUFF. *XVI*, p. 232. *Pl. enl. No. 970.*—*La Mouette rieuse à pattes rouges*, BRISS.—LATH. *Gen. Syn. III*, pt. 2, p. 380.—*Br. Zool. II*, 252. *Arct. Zool. No. 454, 455.*—*Laughing Gull*, CATESBY, I, 89.—WILL. *Orn.* p. 347. *pl. 66.*—*Pewit, Black-cap, or Sea-crow*, RAII, *Syn.* p. 128, A. 5.—BEWICK, II, 200.—PEALE's *Museum*, No. 3381.

LENGTH seventeen inches, extent three feet six inches; bill, thighs, legs, feet, sides of the mouth and eyelids dark blood red; inside of the mouth vermillion; bill nearly two inches and a half long; the nostril is placed rather low; the eyes are black; above and below each eye there is a spot of white; the head and part of the neck are black, remainder of the neck, breast, whole lower parts, tail coverts and tail pure white; the scapulars, wing coverts and whole upper parts are of a fine blue ash color; the first five primaries are black towards their extremities; the secondaries are tipped largely with white, and almost all the primaries slightly; the bend of the wing is white, and nearly three inches long; the tail is almost even, it consists of twelve feathers, and its coverts reach within an inch and a half of its tip; the wings extend two inches beyond the tail; a delicate blush is perceptible on the breast and belly.

The head of the female is of a dark dusky slate color, in other respects she resembles the male.

We are inclined to the opinion, that the three Gulls of La-tham, *viz.* the Black-headed G. the Red-legged G. and the Laugh-ing G. are one and the same species, the very bird which we have been describing, the difference in their markings arising from their

age and sex. We feel imboldened to this declaration from the circumstance of having ourselves shot Gulls which corresponded almost precisely to those of the above author, of the same habits, the same voice, and which were found associating together. In some specimens the crown was of a dusky gray; the upper part and sides of the neck of a lead color; the bill and legs of a dirty, dark, purplish brown. Others had not the white spots above and below the eyes.

The changes of plumage, to which this genus of birds are subject, have tended not a little to confound the naturalist; and a considerable collision of opinion, arising from an imperfect acquaintance with the living subjects, has been the result. To investigate thoroughly their history, it is obviously necessary that the ornithologist should frequently explore their native haunts; and to determine the species of periodical or occasional visitors, an accurate comparative examination of many specimens, either alive or recently killed, is indispensable. Less confusion would arise among authors and nomenclators, if they would occasionally abandon their accustomed walks—their studies and their museums, and seek *correct* knowledge in the only place where it is to be obtained—in the grand Temple of Nature. As it respects, in particular, the tribe under review, the zealous inquirer would find himself amply compensated for all his toil, by observing these neat and clean birds coursing along the rivers and coast, enlivening the prospect by their airy movements: now skimming closely over the watery element, watching the motions of the fretted surges, and now rising into the higher regions sporting with the winds; while he inhaled the invigorating breezes of the ocean, and listened to the melody of the cedar groves, mingled with the hoarse but soothing murmurs of the billows.

The Black-headed Gull is the most beautiful and most sociable of its genus. They make their appearance on the coast of Newjersey in the latter part of April; and do not fail to give no-

tice of their arrival by their familiarity and loquacity. The inhabitants treat them with the same indifference that they manifest towards all those harmless birds which do not minister either to their appetite or their avarice; and hence the Black-heads may be seen in companies around the farm-house; coursing along the river shores, gleaning up the refuse of the fishermen, and the animal substances left by the tide; or scattered over the marshes and newly ploughed fields, regaling on the worms, insects and their larvæ, which, in the vernal season, the bounty of Nature provides for the sustenance of myriads of the feathered race.

On the Jersey side of the Delaware bay, in the neighborhood of Fishing creek, about the middle of May, the Black-headed Gulls assemble in great multitudes, to feed upon the remains of the King Crabs which the hogs have left, or upon the spawn which those curious animals deposit in the sand, and which is scattered along the shore by the waves. At such times if any one approach to disturb them, the Gulls will rise up in clouds, every individual squalling so loud, that the congregated roar may be heard at the distance of two or three miles.

It is an interesting spectacle to behold this species when about recommencing their migrations. If the weather be calm, they will rise up in the air, spirally, chattering all the while to each other in the most sprightly manner, their notes at such times resembling the singing of a hen, but far louder, and are often changed into a *haw, ha ha ha haw!* the last syllable lengthened out like the excessive laugh of a negro. When mounting and mingling together, like motes in the sun beams, their black heads and wing tips, and snow white plumage give them a very beautiful appearance. After gaining an immense height they all move off, with one consent, in a direct line towards the point of their destination.

This bird breeds on the marshes. The eggs are three in number, of a dun clay color, thinly marked with small irregular touches of a pale purple, and as many such of pale brown; some

are of a deeper dun, with larger marks, and less tapering than others; the egg measures two inches and a quarter by one inch and a half.

The Black-heads frequently penetrate into the interior, especially as far as Philadelphia; but they seem to prefer the neighborhood of the coast for the purpose of breeding. They retire southward early in the autumn.

This species is found in every part of Russia and Siberia, and even in Kamtschatka. They are seen throughout the winter at Aleppo, in great numbers, and so tame, that the women are said to call them from the terraces of their houses, throwing up pieces of bread, which these birds catch in the air.*

The Black-headed Gull is common in Great Britain. "In former times," says Bewick, "these birds were looked upon as valuable property, by the owners of some of the fens and marshes in this kingdom, who, every autumn, caused the little islets or hafts, in those wastes, to be cleared of the reeds and rushes, in order properly to prepare the spots for the reception of the old birds in the spring, to which places at that season they regularly returned in great flocks to breed. The young ones were then highly esteemed as excellent eating, and on that account were caught in great numbers before they were able to fly. Six or seven men, equipped for this business, waded through the pools, and with long staves drove them to the land, against nets placed upon the shores of these hafts, where they were easily caught by the hand, and put into pens ready prepared for their reception. The gentry assembled from all parts to see the sport. Dr. Plot in his *Natural History of Staffordshire*, published in 1686, gives the above particulars, and says that in this manner as many have been caught in one morning as, when sold at five shillings per dozen (the usual price at that time) produced the sum of twelve

* Vide Dr. Russel's description of Aleppo.

pounds ten shillings; and that in the several drifts on the few succeeding days of this sport, they have been taken in some years in such abundance, that their value, according to the above rate, was from thirty to sixty pounds—a great sum in those days. These were the *See Gulles* of which we read as being so plentifully provided at the great feasts of the ancient nobility and bishops of this realm. Although the flesh of these birds is not now esteemed a dainty, and they are seldom sought after as an article of food, yet in the breeding season, where accommodation and protection are afforded them, they still regularly resort to the same old haunts, which have been occupied by their kind for a long time past. This is the case with the flocks which now breed at Pallinsburne, in Northumberland, where they are accounted of great use in clearing the surrounding lands of noxious insects, worms, slugs, &c.”*

* Bewick's British Birds, part ii, p. 201.

LITTLE AUK.

ALCA ALLE.

[Plate LXXIV.—Fig. 5.]

LATH. *Gen. Syn.* p. 327.—BR. *Zool.* II, No. 233, pl. 82. *Arct. Zool.* No. 429.—TURT. *Syst.* I, 338.—*Faun. Suec.* No. 142. *Faun. Grœnl.* No. 54.—BRUN. *Orn.* No. 106.—MARTIN's *Spitzb.* 85.—*Mergulus melanoleucus rostro acuto brevi*, RAI, *Syn.* p. 135, A. 5.—*Small black and white Diver*, WILL. *Orn.* p. 343, pl. 59.—EDWARDS, pl. 91.—*Greenland Dove, or Sea Turtle*, ALBIN, I, pl. 85.—*Le petit Guillemot*, BRISSON, *Orn.* VI, p. 73, 2.—BUFFON, *Ois.* XVIII, p. 21. *Pl. enl.* No. 917.—BEWICK's *British Birds*, II, p. 158.—PEALE's *Museum*, No. 2978.

OF the history of this little stranger but few particulars are known. With us it is a very rare bird, and when seen it is generally in the vicinity of the sea. The specimen from which the figure in the plate was taken, was killed at Great Egg-harbor in the month of December, 1811, and was sent to Mr. Wilson as a great curiosity. It measured nine inches in length, and fourteen in extent; the bill, upper part of the head, back, wings and tail were black; the upper part of the breast, and hind head were gray, or white mixed with ash; the sides of the neck, whole lower parts, and tips of secondaries were pure white; feet and legs black, shins pale flesh color; above each eye there was a small spot of white;* the lower scapulars streaked slightly with the same. This bird has no heel, and the exterior toe is the largest.

The Little Auk is said to be but a rare visitant of the British isles. It is met with in various parts of the north, even as far as Spitzbergen; is common in Greenland, in company with the black-billed species, and feeds upon the same kind of food. The Greenlanders call it the Ice-bird, from the circumstance of its being the

* In Peale's Museum there is an excellent specimen of this species, which has likewise a smaller spot below each eye.

harbinger of ice. It lays *two* bluish white eggs,* larger than those of the Pigeon. It flies quick, and dives well; and is always dipping its bill into the water while swimming, or at rest on that element. Walks better on land than others of the genus. It grows fat in the stormy season, from the waves bringing plenty of crabs and small fish within its reach. It is not a very crafty bird, and may be easily taken. It varies to quite white; and sometimes is found with a reddish breast.†

To the anatomist, the internal organization of this species is deserving attention: it is so constructed as to be capable of contracting or dilating itself at pleasure. We know not what Nature intends by this conformation, unless it be to facilitate diving, for which the compressed form is well adapted; and likewise the body when expanded will be rendered more buoyant, and fit for the purpose of swimming upon the surface of the water.

* Birds of the Auk genus are said to lay but *one* egg.

† Latham. Pennant.

TURKEY VULTURE, OR TURKEY-BUZZARD.

VULTUR AURA.

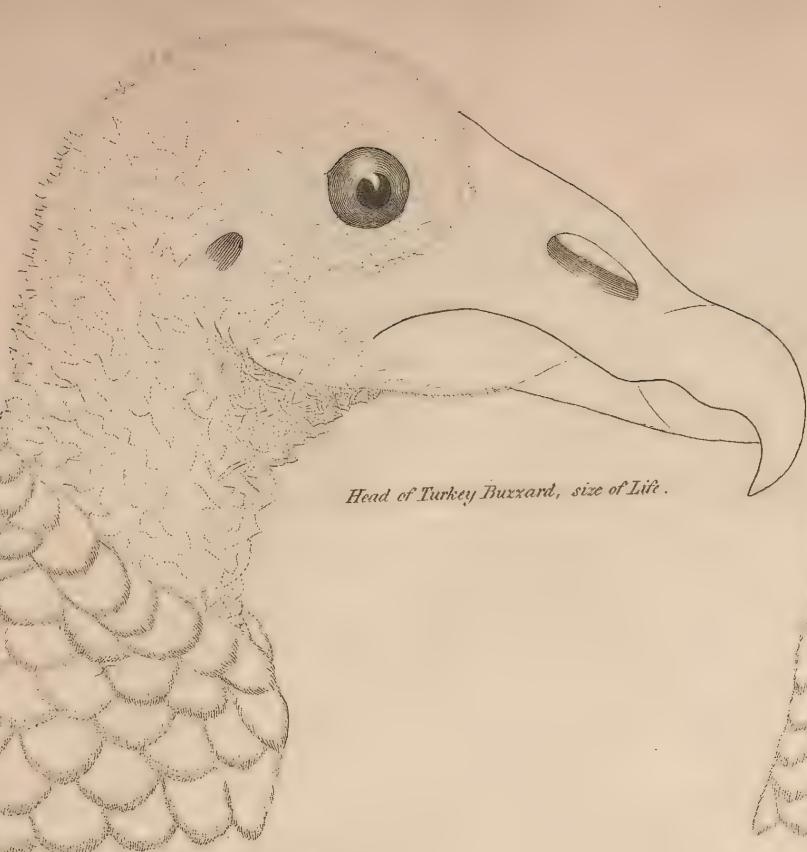
[Plate LXXV.—Fig. 1.]

Uruba, aura Tzopilotl, MARCGRAVE, Mexico, 207, 208.—HERNANDEZ, Mex. 331.—*Vultur Gallinæ Africanae facie, Carion Crow*, SLOANE, Jam. II, p. 294, tab. 254.—BROWN, Jam. 471.—DAMP. Voy. II, pt. 2, p. 67.—BARTRAM's Travels, p. 289.—CATESBY's Carolina, I, 6.—*Corvus sylvaticus*, BARRERE, 129.—LAWSON's Carolina, 138.—BANCROFT, 152.—DU PRATZ, II, 77.—WILL. Orn. 68. RAI, Syn. No. 180.—LINN. Syst. 122.—*Carrion Vulture*, LATH. Gen. Syn. I, 9, No. 5. Id. Sup. p. 2.—PENN. Arct. Zool. I, p. 221.—*Vautour du Brésil*, DE BUFF. Ois. I, 246. Pl. enl. No. 187.—BRISSON, I, 468.—*Cozcaquauhtli*, CLAVIGERO, Hist. Mex. I, 47.—PEALE'S Museum, No. 11, male—12, female.

THIS species is well known throughout the United States, but is most numerous in the southern section of the union. In the northern and middle states it is partially migratory, the greater part retiring to the south on the approach of cold weather. But numbers remain all the winter in Maryland, Delaware and New-jersey; particularly in the vicinity of the large rivers and the ocean, which afford a supply of food at all seasons.

In Newjersey,* the Turkey-buzzard hatches in May, the deep recesses of the solitary swamps of that state affording situations well suited to the purpose. The female is at no pains to form a nest with materials; but having chosen a suitable place, which is either a truncated hollow tree, an excavated stump or log, she lays on the rotten wood from two to four eggs, of a dull dirty white, or pale cream color, splashed all over with chocolate, mingled with blackish touches, the blotches largest and thickest towards

* The editor mentions Newjersey in particular, as in that state he has visited the breeding places of the Turkey-buzzard, and can therefore speak with certainty of the fact. Pennsylvania, it is more than probable, affords situations equally attractive, which are also tenanted by this Vulture, for hatching and rearing its young.



Head of Turkey Buzzard, size of Life.



Head of Black Vulture, size of Life.



1. Turkey Buzzard. 2. Black Vulture. 3. Raven.

Engraved by A. Lawson.

the great end; the form something like the egg of a Goose, but blunter at the small end; length two inches and three quarters, breadth two inches. The male watches often while the female is sitting; and if not disturbed they will occupy the same breeding place for several years. The young are clothed with a whitish down, similar to that which covers young goslings. If any person approach the nest and attempt to handle them, they will immediately vomit such offensive matter, as to compel the intruder to a precipitate retreat:

The Turkey-buzzards are gregarious, peaceable and harmless: never offering any violence to a living animal, or, like the plunderers of the *Falco* tribe, depriving the husbandman of his stock. Hence, though in consequence of their filthy habits they are not beloved, yet they are respected for their usefulness; and in the southern states, where they are most needed, they, as well as the Black Vultures, are protected by a law, which imposes a fine on those who wilfully deprive them of life. They generally roost in flocks, on the limbs of large trees; and they may be seen on a summer's morning, spreading out their wings to the rising sun, and remaining in that posture for a considerable time. Pennant conjectures that this is "to purify their bodies, which are most offensively fetid." But is it reasonable to suppose that *that* effluvia can be offensive to them, which arises from food perfectly adapted to their nature, and which is constantly the object of their desires? Many birds, and particularly those of the granivorous kind, have a similar habit, which doubtless is attended with the same exhilarating effects, that an exposure to the pure air of the morning has on the frame of one just risen from repose.

These birds, unless when rising from the earth, seldom flap their wings, but sweep along in ogees, and dipping and rising lines, and move with great rapidity. They are often seen in companies, soaring at an immense height, particularly previous to a thunderstorm. Their wings are not spread horizontally, but form

a slight angle with the body upwards, the tips having an upward curve. Their sense of smelling is astonishingly exquisite, and they never fail to discover carrion, even when at the distance from it of several miles. When once they have found a carcass, if not molested, they will not leave the place until the whole is devoured. At such times they eat so immoderately that frequently they are incapable of rising, and may be caught without much difficulty; but few that are acquainted with them will have the temerity to undertake the task. A man in the state of Delaware, a few years since, observing some Turkey-buzzards regaling themselves upon the carcass of a horse, which was in a highly putrid state, conceived the design of making a captive of one, to take home for the amusement of his children. He cautiously approached, and, springing upon the unsuspecting group, grasped a fine plump fellow in his arms, and was bearing off his prize in triumph; when lo! the indignant Vulture disgorged such a torrent of filth in the face of our hero, that it produced all the effects of the most powerful emetic, and forever cured him of his inclination for Turkey-buzzards.

On the continent of America this species inhabits a vast range of territory, being common,* it is said, from Nova Scotia to Terra del Fuego.† How far to the northward of North California‡ they are found we are not informed; but it is probable that they extend their migrations to the Columbia, allured thither by the

* In the northern states of our union the Turkey-buzzard is only occasionally seen, it is considered a rare bird by the inhabitants.

† "Great numbers of a species of Vulture, commonly called, Carrion Crow by the sailors, (*Vultur aura*), were seen upon this island (New-year's Island, near Cape Horn, lat. 55 S. 67 W.), and probably feed on young seal-cubs, which either die in the birth, or which they take an opportunity to seize upon." Cook calls them Turkey Buzzards. Forster's *voy. ii*, p. 516, quarto, London, 1777. We strongly suspect that the sailors were correct, and that these were Black Vultures, or Carrion-crows.

‡ Pérouse saw a bird, which he calls the Black Vulture, probably the *V. aura*, at Monterey Bay, North California. *Voy. ii*, p. 203.

quantity of dead salmon which at certain seasons line the shores of that river.

They are numerous in the West India islands, where they are said to be "far inferior in size to those of North America."* This leads us to the inquiry whether or no the present species has been confounded, by all the naturalists of Europe, with the Black Vulture, or Carrion-crow, which is so common in the southern parts of our continent. If not, why has the latter been totally overlooked in the numerous Ornithologies and Nomenclatures with which the world has been favored, when it is so conspicuous and remarkable, that no stranger who visits South Carolina, Georgia, or the Spanish provinces, but is immediately struck with the novelty of its appearance? We can find no cause for the Turkey-buzzards of the islands† being smaller than ours, and must conclude that the Carrion-crow, which is of less size, has been mistaken for the former. In the history which follows, we shall endeavor to make it evident that the species described by Ulloa, as being so numerous in South America, is no other than the Black Vulture. The ornithologists of Europe, not aware of the existence of a new species, have, without investigation, contented themselves with the opinion, that the bird called by the above mentioned traveller the Gallinazo, was the *Vultur aura*, the subject of our present history. This is the more inexcusable, as we expect in naturalists a precision of a different character from that which distinguishes vulgar observation. If the Europeans had not the opportunity of comparing living specimens of the two species, they at least had

* Pennant, Arctic Zoology.

† The Vulture which Sir Hans Sloane has figured and described, and which he says is common in Jamaica, is undoubtedly the *Vultur aura*: "The head and an inch in the neck are bare and without feathers, of a flesh color, covered with a thin membrane, like that of Turkies, with which the most part of the bill is covered likewise; bill (below the membrane) more than an inch long, whitish at the point; tail broad and nine inches long; legs and feet three inches long; it flies exactly like a Kite, and preys on nothing living, but when dead it devours their carcasses, whence they are not molested." Sloane, Nat. Hist. Jam. vol. ii, p. 294, folio.

preserved subjects, in their extensive and valuable museums, from which a correct judgment might have been formed. The figure in the *Planches enluminées*, though wretchedly drawn and colored, was evidently taken from a stuffed specimen of the Black Vulture.

Pennant observes that the Turkey Vultures "are not found in the northern regions of Europe or Asia, at least in those latitudes which might give them a pretence of appearing there." "I cannot find them," he continues, "in our quarter of the globe higher than the *Grison Alps*,*" or *Silesia*,† or at farthest *Kalish*, in *Great Poland*."‡

Kolben, in his account of the Cape of Good-Hope, mentions a Vulture, which he represents as very voracious and noxious: "I have seen," says he, "many carcasses of cows, oxen, and other tame creatures which the *Eagles* had slain. I say carcasses, but they were rather skeletons, the flesh and entrails being all devoured, and nothing remaining but the skin and bones. But the skin and bones being in their natural places, the flesh being, as it were, scooped out, and the wound by which the Eagles enter the body being ever in the belly, you would not, till you had come up to the skeleton, have had the least suspicion that any such matter had happened. The Dutch at the Cape frequently call those Eagles, on account of their tearing out the entrails of beasts, *Strunt-Vogels* i. e. Dung-birds. It frequently happens, that an ox that is freed from the plough, and left to find his way home, lies down to rest himself by the way; and if he does so, 'tis a great chance but the Eagles *fall upon him and devour him*. They attack an ox or cow in a body, consisting of an hundred and upwards."§

Buffon conjectures that this murderous Vulture is the Turkey-buzzard, and concludes his history of the latter with the

* Willughby, *Orn.* p. 67.

† Schwenckfeldt, av. *Silesia*, 375.

‡ Rzaczynski, *Hist. Nat. Poland*, 298.

§ Medley's Kolben, vol. ii, p. 135.

following invective against the whole fraternity : " In every part of the globe they are voracious, slothful, offensive and hateful, and, like the wolves, are as *noxious during their life*, as useless after their death."

If Kolben's account of the ferocity of his Eagle,* or Vulture be just, we do not hesitate to maintain that *that* Vulture is *not* the Turkey-buzzard, as amongst the whole feathered creation there is none, perhaps, more innoxious than this species ; and that it is beneficial to the inhabitants of our southern continent, even Buffon himself, on the authority of Desmarchais, asserts. But we doubt the truth of Kolben's story ; and, in this place, must express our regret, that enlightened naturalists should so readily lend an ear to the romances of travellers, who, to excite astonishment, freely give currency to every ridiculous tale, which the designing or the credulous impose upon them. We will add further, that the Turkey-buzzard seldom begins upon a carcass, until invited to the banquet by that odor, which in no ordinary degree renders it an object of delight.

The Turkey Vulture is two feet and a half in length, and six feet two inches in breadth ; the bill from the corner of the mouth is almost two inches and a half long, of a dark horn color for somewhat more than an inch from the tip, the nostril a remarkably wide slit or opening through it ; the tongue is greatly concave, cartilaginous, and finely serrated on its edges ; ears inclining to oval ; eyes dark, in some specimens reddish hazel ; the head and neck for about an inch and a half below the ears, are furnished with a reddish, wrinkled skin, beset with short black hairs, which also covers the bill as far as the anterior angle of the nostril, the neck not so much caruncled as that of the Black Vulture ;

* These blood-thirsty Eagles we conjecture are Black Vultures, they being in the habit of mining into the bellies of *dead* animals to feast upon the contents. With respect to their attacking those that are *living*, as the Vultures of America are not so heroic, it is a fair inference that the same species elsewhere are possessed of a similar disposition.

from the hind head to the neck feathers the space is covered with down of a sooty black color; the fore part of the neck is bare as far as the breast bone, the skin on the lower part, or pouch, very much wrinkled, this naked skin is not discernable without removing the plumage which arches over it; the whole lower parts, lining of the wings, rump and tail coverts are of a sooty brown, the feathers of the belly and vent hairy; the plumage of the neck is large and tumid, and, with that of the back and shoulders, black; the scapulars and secondaries are black on their outer webs, skirted with tawny brown, the latter slightly tipped with white; primaries and their coverts plain brown, the former pointed, third primary the longest; coverts of the secondaries, and lesser coverts tawny brown, centred with black, some of the feathers at their extremities slightly edged with white; the tail is twelve inches long, rounded, of a brownish black, and composed of twelve feathers, which are broad at their extremities; inside of wings and tail light ash; the wings reach to the end of the tail; the whole body and neck beneath the plumage are thickly clothed with a white down, which feels like cotton; the shafts of the primaries are yellowish white above, and those of the tail brown, both pure white below; the plumage of the neck, back, shoulders, scapulars and secondaries is glossed with green and bronze, and has purple reflections; the thighs are feathered to the knees; feet considerably webbed; middle toe three inches and a half in length, and about an inch and a half longer than the outer one, which is the next longest; the sole of the foot is hard and rough; claws dark horn color; the legs are of a pale flesh color, and three inches long. The claws are larger, but the feet slenderer than those of the Carrion-crow. The bill of the male is pure white, in some specimens the upper mandible is tipped with black. There is little or no other perceptible difference between the sexes.

The bird from which the foregoing description was taken, was shot for this work, at Great Egg-harbor, the thirtieth of last

January. It was a female, in perfect plumage, excessively fat, and weighed five pounds one ounce avoirdupois. On dissection, it emitted a slight musky odor.

The Vulture is included in the catalogue of those fowls declared unclean and an abomination by the Levitical law, and which the Israelites were interdicted *eating*.* We presume that this prohibition was religiously observed, so far at least as it related to the Vulture, from whose flesh there arises such an unsavory odor, that we question if all the sweetening processes ever invented could render it palatable to a Jew, Pagan, or Christian.

Since the above has been ready for the press we have seen the History of the Expedition under the command of Lewis and Clark, and find our conjecture with respect to the migration of the Turkey-buzzard, verified, several of this species having been observed at Brant Island, near the falls of the Columbia.†

* Leviticus, xi, 14. Deuteronomy, xiv, 13.

† Hist. of the Exped. vol. ii, p. 233.

BLACK VULTURE, OR CARRION-CROW.

VULTUR ATRATUS.

[Plate LXXV.—Fig. 2.]

BARTRAM, p. 289.—*Gallinazo*, **ULLOA**, *Voy. I*, p. 52.—*Zopilot*, **CLAVIGERO**, *Hist. Mex. vol. I*, p. 47.
—*Vultur jota*, **MOLINA**, *Hist. Chili*, I, p. 185.—**PEALE's Museum**, No. 13.

ALTHO an account of this Vulture was published more than twenty years ago, by Mr. William Bartram, wherein it was distinctly specified as a different species from the preceding, yet it excites our surprise that the ornithologists should have persisted in confounding it with the Turkey-buzzard: an error which can hardly admit of extenuation, when it is considered what a respectable authority they had for a different opinion.

The habits of this species are singular. In the towns and villages of the southern states, particularly Charleston and Georgetown, South Carolina, and in Savannah, Georgia, the Carrion-crows may be seen either sauntering about the streets; sunning themselves on the roofs of the houses, and the fences; or, if the weather be cold, cowering around the tops of the chimneys, to enjoy the benefit of the heat, which to them is a peculiar gratification. They are protected by a law or usage; and may be said to be completely domesticated, being as common as the domestic poultry, and equally familiar. The inhabitants generally are disgusted with their filthy, voracious habits; but notwithstanding, being viewed as contributive to the removal of the dead animal matter, which if permitted to putrefy during the hot season, would render the atmosphere impure, they have a respect paid them as scavengers, whose labors are subservient to the public good. It sometimes happens that, after having gorged themselves, these birds

vomit down the chimneys, which must be intolerably disgusting, and must provoke the ill will of those whose hospitality is thus requited.

The Black Vultures are indolent, and may be observed in companies loitering for hours together in one place. They do not associate with the Turkey-buzzards; and are much darker in their plumage than the latter. Their mode of flight also varies from that of the Turkey-buzzard. The Black Vulture flaps its wings five or six times rapidly, then sails with them extended nearly horizontally; the Turkey-buzzard seldom flaps its wings, and when sailing they form an angle with the body upwards. The latter, though found in the vicinity of towns, rarely ventures within them, and then always appearing cautious of the near approach of any one. It is not so impatient of cold as the former; and is likewise less lazy. The Black Vulture, on the ground, hops along very awkwardly; the Turkey-buzzard, though seemingly inactive, moves with an even gait. The latter, unless pressed by hunger, will not eat of a carcass until it becomes putrid; the former is not so fastidious, but devours animal food without distinction.

It is said that the Black Vultures sometimes attack young pigs, and eat off their ears and tails; and we have even heard stories of their assaulting feeble calves and picking out their eyes. But these instances are rare; if otherwise they would not receive that countenance or protection which is so universally extended to them, in the states of South Carolina and Georgia, where they abound.

"This undescribed species," says Mr. Bartram, "is a native of the maritime parts of Georgia and of the Floridas, where they are called Carrion-crows. They flock together, and feed upon carrion; but do not mix with the Turkey-buzzard (*V. aura*). Their wings are broad and round at their extremities. Their tail, which they spread like a fan when on the wing, is remarkably short. They have a heavy, laborious flight, flapping their wings, and

sailing alternately. The whole plumage is of a sable or mourning color.”*

In one of Mr. Wilson’s journals I find an interesting detail of the greedy and disgusting habits of this species; and shall give the passage entire, in the same unadorned manner in which it is written.

“ February 21, 1809. Went out to Hampstead† this forenoon. A horse had dropped down in the street, in convulsions; and dying it was dragged out to Hampstead and skinned. The ground for a hundred yards around it was black with Carrion-crows; many sat on the tops of sheds, fences, and houses within sight; sixty or eighty on the opposite side of a small run. I counted at one time two hundred and thirty-seven, but I believe there were more, besides several in the air over my head, and at a distance. I ventured cautiously within thirty yards of the carcass, where three or four dogs, and twenty or thirty Vultures were busily tearing and devouring. Seeing them take no notice, I ventured nearer, till I was within ten yards, and sat down on the bank. Still they paid little attention to me. The dogs being sometimes accidentally flapped with the wings of the Vultures, would growl and snap at them, which would occasion them to spring up for a moment, but they immediately gathered in again. I remarked the Vultures frequently attack each other, fighting with their claws or heels, striking like a cock, with open wings, and fixing their claws in each others head. The females, and I believe the males likewise, made a hissing sound, with open mouth, exactly resembling that produced by thrusting a red hot poker into water; and frequently a snuffling, like a dog clearing his nostrils, as I suppose they were theirs. On observing that they did not heed me, I stole so close that my feet were within one yard of the horse’s legs, and again sat down. They all slid aloof a few feet; but seeing me quiet,

* MS. in the possession of the editor.

† Near Charleston, South Carolina.

they soon returned as before. As they were often disturbed by the dogs, I ordered the latter home: my voice gave no alarm to the Vultures. As soon as the dogs departed, the Vultures crowded in such numbers, that I counted at one time thirty-seven on and around the carcass, with several within; so that scarcely an inch of it was visible. Sometimes one would come out with a large piece of the entrails, which in a moment was surrounded by several others, who tore it in fragments, and it soon disappeared. They kept up the hissing occasionally. Some of them having their whole legs and heads covered with blood, presented a most savage aspect. Still as the dogs advanced I would order them away, which seemed to gratify the Vultures; and one would pursue another to within a foot or two of the spot where I was sitting. Sometimes I observed them stretching their necks along the ground, as if to press the food downwards."

The Carrion-crow is seldom found on the Atlantic, to the northward of Newbern, North Carolina,* but inhabits the whole continent, to the southward, as far as Cape Horn. Don Ulloa, in noticing the birds of Carthagena, gives an account of a Vulture; which we shall quote, in order to establish the opinion, advanced in the preceding history, that it is the present species. We shall afterwards subjoin other testimony in confirmation of this opinion. With respect to the marvellous tale of their attacking the cattle in the pastures, it is too improbable to merit a serious refutation.

"It would be too great an undertaking to describe all the extraordinary birds that inhabit this country; but I cannot refrain from noticing that to which they give the name of *Gallinazo*, from the resemblance it has to the Turkey-hen. This bird is of the size of a Pea-hen, but its head and neck are something larger. From the crop to the base of the bill it has no feathers; this space

* Since writing the above I have been informed by a gentleman who resides at Detroit, on Lake Erie, that the Carrion-crow is common at that place.

is surrounded with a wrinkled, glandulous, and rough skin, which forms numerous warts, and other similar inequalities. *This skin is black*, as is the plumage of the bird, but usually of a brownish black. The bill is well proportioned, strong, and a little hooked. These birds are familiar in Carthagena, the tops of the houses are covered with them; it is them which cleanses the city of all its animal impurities. There are few animals killed whereof they do not obtain the offals; and when this food is wanting, they have recourse to other filth. Their sense of smelling is so acute, that it enables them to trace carrion at the distance of three or four leagues; which they do not abandon until there remains nothing but the skeleton.

“The great number of these birds found in such hot climates, is an excellent provision of nature; as otherwise, the putrefaction caused by the constant and excessive heat, would render the air insupportable to human life. When first they take wing they fly heavily; but afterwards they rise so high as to be entirely invisible. On the ground they walk sluggishly. Their legs are well proportioned; they have three toes forward, turning inwards, and one in the inside, inclining a little backwards, so that the feet interfering, they cannot walk with any agility, but are obliged to *hop*; each toe is furnished with a long and stout claw.

“When the Gallinazos are deprived of carrion, or food in the city, they are driven by hunger among the cattle of the pastures. If they see a beast with a sore on the back, they alight on it, and attack the part affected; and it avails not that the poor animal *throws itself upon the ground*, and endeavours to intimidate them by its bellowing: *they do not quit their hold!* and by means of their bill they so soon enlarge the wound, that the animal finally becomes their prey.”*

* Voyage Historique De L’Amerique Meridionale, par Don George Juan et Don Antoine De Ulloa, liv. I, chap. viii, p. 52. A Amsterdam et a Leipzig, 1752, quarto.

The account, from the same author, of the beneficial effects resulting from the fondness of the Vultures for the eggs of the alligator, merits attention.

"The Gallinazos are the most inveterate enemies of the alligators, or rather they are extremely fond of their eggs; and employ much stratagem to obtain them. During the summer, these birds make it their business to watch the female alligators; for it is in that season that they deposit their eggs in the sand of the shores of the rivers, which are not then overflowed. The Gallinazo conceals itself among the branches and leaves of a tree, so as to be unperceived by the alligator; and permits the eggs quietly to be laid, not even interrupting the precautions that she takes to conceal them. But she is no sooner under the water, than the Gallinazo darts upon the nest; and with its bill, claws, and wings uncovers the eggs, and gobbles them down, leaving nothing but the shells. This banquet would indeed richly reward its patience, did not a multitude of Gallinazos join the fortunate discoverer, and share in the spoil.

"How admirable the wisdom of that Providence, which hath given to the male alligator an inclination to devour its own offspring; and to the Gallinazo a taste for the eggs of the female. Indeed neither the rivers, nor the neighboring fields would otherwise be sufficient to contain the multitudes that are hatched; for notwithstanding the ravages of both these insatiable enemies, one can hardly imagine the numbers that remain."*

The abbé Clavigero, in his History of Mexico, has clearly indicated the present species, as distinguished from the Turkey-buzzard.

"The business of clearing the fields of Mexico, is reserved principally for the *Zopilots*, known in South America by the name of *Gallinazzi*; in other places, by that of *Aure*; and in some places,

* Liv. iv, chap. ix, p. 172.

though very improperly, by that of Ravens. There are two very different species of these birds; the one, the Zopilot, properly so called, the other called the Cozcaquauhtli: they are both bigger than the Raven. These two species resemble each other in their hooked bill and crooked claws, and by having upon their head instead of feathers, a wrinkled membrane with some curling hairs. They fly so high, that although they are pretty large, they are lost to the sight; and especially before a hail storm they will be seen wheeling, in vast numbers, under the loftiest clouds, till they entirely disappear. They feed upon carrion, which they discover by the acuteness of their sight and smell, from the greatest height, and descend upon it with a majestic flight, in a great spiral course. They are both almost mute. The two species are distinguished, however, by their size, their color, their numbers, and some other peculiarities. The Zopilots, properly so called, have black feathers, with a brown head, bill and feet; they go often in flocks, and roost together upon trees. This species is very numerous, and is to be found in all the different climates; while on the contrary, the Cozcaquauhtli is far from numerous, and is peculiar to the warmer climates alone.* The latter bird is larger than the Zopilot, has a red head and feet, with a beak of a deep red color, except towards its extremity, which is white. Its feathers are brown, except upon the neck and parts about the breast, which are of a reddish black. The wings are of an ash color upon the inside, and upon the outside are variegated with black and tawny.

“The Cozcaquauhtli is called by the Mexicans, *king of the Zopilots*;† and they say, that when these two species happen to meet together about the same carrion, the Zopilot never begins to eat till the Cozcaquauhtli has tasted it. The Zopilot is a most useful bird to that country, for they not only clear the fields, but

* This is a mistake.

† This is the *Vultur aura*. The bird which now goes by the name of *King of the Zopilots*, in New Spain, is the *Vultur papa* of Linnaeus.

attend the crocodiles and destroy the eggs which the females of those dreadful amphibious animals leave in the sand to be hatched by the heat of the sun. The destruction of such a bird ought to be prohibited under severe penalties.”*

We are almost afraid of trespassing upon the patience of the reader by the length of our quotations; but as we are very anxious that the subject of this article should enjoy that right to which it is fairly entitled, of being ranked as an independent species, we are tempted to add one testimony more, which we find in the History of Chili, by the abbé Molina.

“The *jota* (*Vultur jota*) resembles much the *aura*, a species of vulture, of which there is perhaps but one variety. It is distinguished, however, by the beak, which is grey with a black point. Notwithstanding the size of this bird, which is nearly that of the turkey, and its strong and crooked talons, it attacks no other, but feeds principally upon carcasses and reptiles. It is extremely indolent, and will frequently remain for a long time almost motionless, with its wings extended, sunning itself upon the rocks, or the roofs of the houses. When in pain, which is the only time that it is known to make any noise, it utters a sharp cry like that of a rat; and usually disgorges what it has eaten. The flesh of this bird emits a fetid smell that is highly offensive. The manner in which it builds its nest is perfectly correspondent to its natural indolence; it carelessly places between rocks, or even upon the ground, a few dry leaves or feathers, upon which it lays two eggs of a dirty white.”†

The Black Vulture is twenty-six inches in length, and four feet four inches in extent; the bill is two inches and a half long, of a dark horn color as far as near an inch, the remainder, the head, and a part of the neck are covered with a black, wrinkled,

* Clavigero’s Mexico, translated by Cullen, vol. i, p. 47, London.

† Hist. Chili, Am. trans. i, p. 185.

caruncled skin, beset with short black hairs, and downy behind; nostril an oblong slit; irides reddish hazel; the throat is dashed with yellow ochre; the general color of the plumage is of a dull black, except the primaries, which are whitish on the inside, and have four of their broadened edges below of a drab, or dark cream color, extending two inches, which is seen only when the wing is unfolded, the shafts of the feathers white on both sides; the rest of the wing feathers dark on both sides; the wings when folded are about the length of the tail, the fifth feather being the longest; the secondaries are two inches shorter than the tail, which is slightly forked, the exterior feathers three quarters of an inch longer than the rest; the legs are limy, three inches and a half in length, and with the feet are thick and strong; the middle toe is four inches long, side toes two inches, and considerably webbed, inner toe rather the shortest; claws strong, but not sharp like those of the *Falco genus*, middle claw three quarters of an inch long; the stomach is not lined with hair as reported. When opened, this bird smells strongly of musk.

Mr. Abbot informs me that the Carrion-crow builds its nest in the large trees of the low wet swamps, to which places they retire every evening to roost. "They frequent," says he, "that part of the town of Savannah where the hog-butchers reside, and walk about the streets, in great numbers, like domestic fowls. It is diverting to see, when the entrails and offals of the hogs are thrown to them, with what greediness they scramble for the food, seizing upon it and pulling one against another until the strongest prevails. The Turkey-buzzard is accused of killing young lambs and pigs, by picking out their eyes, but I believe that the Carrion-crow is not guilty of the like practices. The two species do not associate."

RAVEN.

CORVUS CORAX.

[Plate LXXV.—Fig. 3.]

TURT. *Syst.* I, 218.—Korp, *Faun. Suec.* No. 85. *Faun. Grænl.* p. 62.—LEEMS, 240.—*Le Corbeau*, DE BUFF. V, 16. *Pl. enl.* No. 495.—BRISS. II, 8.—PENN. *Br. Zool.* I, No. 74. *Arct. Zool.* No. 134.—LATH. I, 367.—BEWICK, I, 100.—RAII, *Syn.* p. 39.—WILL. *Orn.* p. 121, pl. 18.—ALBIN, II, pl. 20.—*Corvus carnivorus*, BARTRAM, p. 290.—PEALE'S *Museum*, No. 175.

A KNOWLEDGE of this celebrated bird has been handed down to us from the earliest ages; and its history is almost coeval with that of man. In the best and most ancient of all books, we learn that at the end of forty days after the great flood had covered the earth, Noah, wishing to ascertain whether or no the waters had abated, sent forth a Raven, which did not return into the ark.* This is the first notice that is taken of this species. Though the Raven was declared unclean by the law of Moses, yet we are informed that when the prophet Elijah provoked the enmity of Ahab, by prophesying against him, and hid himself by the brook Cherith, the Ravens were appointed by Heaven to bring him his daily food.† The color of the Raven has given rise to a similitude in one of the most beautiful of eclogues, which has been perpetuated in all subsequent ages, and which is not less pleasing for being trite or proverbial. The favorite of the royal lover of Jerusalem, in the enthusiasm of affection, thus describes the object of her adoration, in reply to the following question :

What is thy beloved more than another beloved,
O thou fairest among women?

* Genesis, viii, 7.

† 1 Kings, xvii, 5, 6.

My beloved is white and ruddy, the chiehest among
ten thousand. His head is as the most fine gold,
his locks are bushy, and black as a Raven!"*

The above mentioned circumstances taken into consideration, one would suppose that the lot of the subject of this chapter would have been of a different complexion from what history and tradition inform us is the fact. But in every country we are told the Raven is considered an ominous bird, whose croakings foretell approaching evil; and many a crooked beldam has given interpretation to these oracles, of a nature to infuse terror into a whole community. Hence this ill-fated bird, from time immemorial, has been the innocent subject of vulgar obloquy and detestation.

Augury, or the art of foretelling future events by the flight, cries, or motions of birds, descended from the Chaldeans to the Greeks, thence to the Etrurians, and from them it was transmitted to the Romans.† The crafty legislators of these celebrated nations, from a deep knowledge of human nature, made superstition a principal feature of their religious ceremonies; well knowing that it required a more than ordinary policy to govern a multitude, ever liable to the fatal influences of passion; and who without some timely restraints would burst forth like a torrent, whose course is marked by wide-spreading desolation. Hence to the purposes of polity the Raven was made subservient; and the Romans having consecrated it to Apollo, as to the god of divination, its flight was

* Song of Solomon, v, 9, 10, 11.

† That the science of augury is very ancient, we learn from the Hebrew lawgiver, who prohibits it, as well as every other kind of divination. Deut. chap. xviii. The Romans derived their knowledge of augury chiefly from the Tuscans or Etrurians, who practised it in the earliest times. This art was known in Italy before the time of Romulus, since that prince did not commence the building of Rome till he had taken the auguries. The successors of Romulus, from a conviction of the usefulness of the science, and at the same time not to render it contemptible by becoming too familiar, employed the most skilful augurs from Etruria to introduce the practice of it into their religious ceremonies. And by a decree of the senate, some of the youth of the best families in Rome were annually sent into Tuscany to be instructed in this art. Vide Ciceron. de Divin. Also Calmet, and the abbé Banier.

observed with the greatest solemnity; and its tones and inflections of voice were noted with a precision which intimated a belief in its infallible prescience.

But the ancients have not been the only people infected with this species of superstition; the moderns, even though favored with the light of Christianity, have exhibited as much folly, through the impious curiosity of prying into futurity, as the Romans themselves. It is true that modern nations have not instituted their sacred colleges or sacerdotal orders, for the purposes of divination; but in all countries, there have been self-constituted augurs, whose interpretations of omens have been received with religious respect by the credulous multitude. Even at this moment, in some parts of the world, if a Raven alight on a village church, the whole fraternity is in an uproar; and Heaven is importuned, in all the ardor of devotion, to avert the impending calamity.

The poets have taken advantage of this weakness of human nature, and in their hands the Raven is a fit instrument of terror. Shakspeare puts the following malediction into the mouth of his Caliban:

As wicked dew, as e'er my mother brush'd,
With *Raven's* feather, from unwholesome fen
Drop on you both!*

The ferocious wife of Macbeth, on being advised of the approach of Duncan, whose death she had conspired, thus exclaims:

The *Raven* himself is hoarse,
That croaks the fatal entrance of Duncan
Under my battlements!†

* *Tempest*, act i, scene 2.

† *Act i, scene 5.*

The Moor of Venice says:

It comes o'er my memory,
As doth the *Raven* o'er the infected house,
Boding to all.*

The last quotation alludes to the supposed habit of this bird's flying over those houses which contain the sick, whose dissolution is at hand, and thereby announced. Thus Marlowe, in the Jew of Malta, as cited by Malone :

The sad presaging *Raven* tolls
The sick man's passport in her hollow beak,
And in the shadow of the silent night
Doth shake contagion from her sable wing.

But it is the province of philosophy to dispel those illusions which bewilder the mind, by pointing out the simple truths which Nature has been at no pains to conceal, but which the folly of mankind has shrouded in all the obscurity of mystery.

The Raven is a general inhabitant of the United States, but is more common in the interior. On the lakes, and particularly in the neighborhood of the Falls of the Niagara river, they are numerous ; and it is a remarkable fact, that where they so abound, the Common Crow, *C. corone*, seldom makes its appearance ; being intimidated, it is conjectured, by the superior size and strength of the former, or by an antipathy which the two species manifest towards each other. This I had an opportunity of observing myself, in a journey during the months of August and September, along the lakes Erie and Ontario. The Ravens were seen every day, prowling about in search of the dead fish which the waves are

* Othello, act iv, scene 1.

continually casting ashore, and which afford them an abundance of a favorite food; but I did not see or hear a single Crow within several miles of the lakes; and but very few through the whole of the Gennesee country.

The food of this species is dead animal matter of all kinds, not excepting the most putrid carrion, which it devours in common with the Vultures; worms, grubs, reptiles and shell fish, the last of which, in the manner of the Crow, it drops from a considerable height in the air on the rocks, in order to break the shells; it is fond of birds' eggs, and is often observed sneaking around the farm house in search of the eggs of the domestic poultry, which it sucks with eagerness; it is likewise charged with destroying young ducks and chickens, and lambs which have been weaned in a sickly state. The Raven, it is said, follows the hunters of deer for the purpose of falling heir to the offal;* and the huntsmen are obliged to cover their game, when it is left in the woods, with their hunting frocks, to protect it from this thievish connoisseur, who, if he have an opportunity, will attack the region of the kidneys, and mangle the saddle without ceremony.

Buffon says that “the Raven *plucks out the eyes of Buffaloes*, and then, *fixing on the back, it tears off the flesh deliberately*; and what renders the ferocity more detestable, it is not incited by the cravings of hunger, but by the appetite for carnage; for it can subsist on fruits, seed of all kinds, and indeed may be considered as an omnivorous animal.” This is mere fable, and of a piece with many other absurdities of the same romancing author.

This species is found almost all over the habitable globe. We trace it in the north from Norway to Greenland, and hear of it in Kamtschatka. It is common every where in Russia and Siberia, except within the Arctic circle;† and all through Europe.

* This is the case in those parts of the United States where the deer are hunted without dogs: where these are employed, they are generally rewarded with the offal.

† Latham.

Kolben enumerates the Raven among the birds of the Cape of Good Hope;* De Grandpré represents it as numerous in Bengal, where they are said to be protected for their usefulness;† and the unfortunate La Pérouse saw them at *Baie de Castries*, on the east coast of Tartary; likewise at *Port des François*, 58° 37' north latitude, and 139° 50' west longitude; and at Monterey Bay, north California.‡ The English circumnavigators met with them at Nootka Sound;§ and at the Sandwich Islands, two being seen in the village of Kakooa; also at Owhyhee, and supposed to be adored there, as they were called Eatooas.** Our intrepid American travellers, under the command of Lewis and Clark, shortly after they embarked on the Columbia river, saw abundance of Ravens, which were attracted thither by the immense quantity of dead salmon which lined the shores.†† They are found at all seasons at Hudson's Bay;‡‡ are frequent in Mexico;§§ and it is more than probable that they inhabit the whole continent of America.

The Raven measures from the tip of the bill to the end of the tail twenty-six inches, and is four feet in extent; the bill is large and strong, of a shining black, notched near the tip, and three inches long, the setaceous feathers which cover the nostrils extend half its length; the eyes are black; the general color is a deep glossy black, with steel-blue reflections; the lower parts are less glossy; the tail is rounded, and extends about two inches beyond the wings; the legs are two inches and a half in length, and, with the feet, are strong and black; the claws are long.

This bird is said to attain to a great age; and its plumage to be subject to change from the influence of years and of climate. It is found in Iceland and Greenland entirely white.

* Medley's Kolben, vol. ii, p. 136.

† Voy. in the Indian Ocean, p. 148.

‡ Voy. par I. F. G. De la Pérouse, ii, p. 129, 203, 443.

§ Cook's last voy. ii, p. 236. Am. ed.

** Idem, iii, p. 329.

†† Gass's Journal, p. 153.

‡‡ Charlevoix. Kalm. Hearne's Journey.

§§ Fernandez.

The Raven was the constant attendant of Lewis and Clark's party in their long and toilsome journey. During the winter, at Fort Mandan, they were observed in immense numbers, notwithstanding the cold was so excessive, that on the seventeenth of December, 1804, the thermometer stood at 45 below 0.

Like the Crow, this species may be easily domesticated, and in that state would afford amusement by its familiarity, frolics and sagacity. But such noisy and mischievous pets, in common with Parrots and Monkeys, are not held in high estimation in this quarter of the globe; and are generally overlooked for those universal favorites, which either gratify the eye by the neatness or brilliancy of their plumage, or gladden the ear by the simplicity or variety of their song.

GREAT-FOOTED HAWK.

FALCO PEREGRINUS.

[Plate LXXVI.]

RAII, *Syn.* p. 13, No. 1.—TURT. *Syst.* I, p. 155.—BELON, *Aves*, 116.—*Falco peregrinus niger*, ALDR. *Aves*, I, 239.—*Sparviere pellegrino femmina*, LORENZI, *Aves*, tab. 24.—*Blue-backed Falcon*, CHARLETONI, *Exercit.* 73.—*Peregrine Falcon*, PENN. *Br. Zool.* I, p. 156, No. 48, pl. 20. *Arct. Zool.* I, p. 236, No. 97.—LATH. *Syn.* I, p. 73, No. 52.—*Peregrine; or haggard Falcon*, WILL. *Orn.* p. 76, tab. 8.—*Spotted Hawk or Falcon*, EDWARDS, I, p. 3. *Black Hawk or Falcon*, IDEM, I, p. 4.—*Le Faucon pelerin*, BRISS. *Aves*, I, 341.—BUFF. *Ois.* I, p. 249, pl. 16, et suiv.—PEALE'S *Museum*, No. 386.

IT is with great pleasure that we are now enabled to give a portrait of this celebrated Hawk, drawn of half the size of life in the best manner of our deceased friend; and engraved by the accurate and ingenious Lawson.

This noble bird had excited our curiosity for a long time. Every visit which we made to the coast, was rendered doubly interesting by the wonderful stories which we heard of its exploits in fowling, and of its daring enterprise. There was not a gunner along the shore but knew it well; and each could relate something of it which bordered on the marvellous. It was described as darting with the rapidity of an arrow on the ducks when on the wing, and striking them down with the projecting bone of its breast. Even the Wild Geese were said to be in danger from its attacks, it having been known to sacrifice them to its rapacity.

To behold this hero, the terror of the wild fowl, and the wonder of the sportsmen, was the chief object of our wishes. Day after day did we traverse the salt marshes, and explore the ponds and estuaries where the web-footed tribes frequent in immense multitudes, in the hope of obtaining the imperial depredator; even all the gunners of the district were summoned to our aid,

Drawn from Nature by G. Wilson.

Great-tailed Hawk.

Engraved by J. L. Green.



with the assurance of a great reward if they procured him, but without success. At length in the month of December, 1812, to the unspeakable joy of Mr. Wilson, he received from Egg-harbor a fine specimen of the far-famed Duck Hawk; which was discovered, contrary to his expectations, to be of a species which he had never before beheld.

If we were to repeat all the anecdotes which have been related to us of the achievements of the Duck Hawk, they would swell our pages at the expense, probably, of our reputation. Naturalists should be always on their guard when they find themselves compelled to resort to the observations of others, and record nothing as fact which has not been submitted to the temperate deliberations of reason. The reverse of this procedure has been a principal cause why errors and absurdities have so frequently deformed the pages of works of science, which, like a plane mirror, ought to reflect only the genuine images of nature.

From the best sources of information, we learn that this species is uncommonly bold and powerful; that it darts on its prey with astonishing velocity; and that it strikes with its formidable feet, permitting the duck to fall previously to securing it. The circumstance of the Hawk's never carrying the duck off on striking it, has given rise to the belief of that service being performed by means of the breast, which vulgar opinion has armed with a projecting bone, adapted to the purpose. But this cannot be the fact, as the breast bone of this bird does not differ from that of others of the same tribe, which would not admit of so violent a concussion.

When the water fowl perceive the approach of their enemy, an universal alarm pervades their ranks; even man himself, with his engine of destruction, is not more terrible. But the effect is different. When the latter is beheld, the whole atmosphere is enlivened with the whistling of wings; when the former is recog-

nised, not a duck is to be seen in the air: they all speed to the water, and there remain until the Hawk has passed them, diving the moment he comes near them. It is worthy of remark that he will seldom, if ever, strike over the water, unless it be frozen; well knowing that it will be difficult to secure his quarry. This is something more than instinct.

When the sportsmen perceive the Hawk knock down a duck, they frequently disappoint him of it, by being first to secure it. And as one evil turn, according to the maxim of the multitude, deserves another, our hero takes ample revenge on them, at every opportunity, by robbing them of their game, the hard-earned fruits of their labor.

The Duck Hawk, it is said, often follows the steps of the gunner, knowing that the ducks will be aroused on the wing, which will afford it an almost certain chance of success.

We have been informed that those ducks which are struck down, have their backs lacerated from the rump to the neck. If this be the fact, it is a proof that the Hawk employs only its talons, which are long and stout, in the operation. One respectable inhabitant of Cape May told us, that he has seen the Hawk strike from below.

This species has been long known in Europe; and in the age of Falconry, was greatly valued for those qualifications which rendered it estimable to the lovers and followers of that princely amusement. But we have strong objections to its specific appellation. The epithet *peregrine* is certainly not applicable to our Hawk, which is not migratory, as far as our most diligent inquiries can ascertain; and as additional evidence of the fact, we ourselves have seen it prowling near the coast of Newjersey in the month of May, and heard its screams, which resemble somewhat those of the Bald Eagle, in the swamps wherein it is said to breed. We have therefore taken the liberty of changing its English name for one which will at once express a characteristic de-

signation, or which will indicate the species without the labor of investigation.*

"This species," says Pennant, "breeds on the rocks of Llandidno, in Cærnarvonshire, Wales.† That promontory has been long famed for producing a generous kind, as appears by a letter extant in Gloddaeth library, from the lord treasurer Burleigh to an ancestor of Sir Roger Mostyn, in which his lordship thanks him for a present of a fine cast of Hawks taken on those rocks, which belong to the family. They are also very common in the north of Scotland; and are sometimes trained for falconry by some few gentlemen who still take delight in this amusement in that part of Great Britain. Their flight is amazingly rapid; one that was reclaimed by a gentleman in the Shire of Angus, a county on the east side of Scotland, eloped from its master with two heavy bells attached to each foot, on the twenty-fourth of September, 1772, and was killed in the morning of the twenty-sixth, near Mostyn, Flintshire."‡

The same naturalist in another place observes, that "*the American species is larger than the European.*"§ They are subject to vary. The Black Falcon, and the Spotted Falcon of Edwards are of this kind; each preserves a specific mark, in the black stroke which drops from beneath the eyes, down towards the neck.

"Inhabits different parts of North America, from Hudson's Bay as low as Carolina. In Asia, is found on the highest parts of the Uralian and Siberian chain. Wanders in summer to the very Arctic circle. Is common in Kamtschatka."**

* "Specific names, to be perfect, ought to express some peculiarity, common to no other of the genus." Am. Orn. i, p. 65.

† We suspect that Pennant is mistaken; its name denotes that it is not indigenous in Great Britain. Bewick says, "The Peregrine or Passenger Falcon, is rarely met with in Britain, and consequently is but little known with us." British Birds, part i, p. 71.

‡ British Zoology.

§ If we were to adopt the mode of philosophizing of the *sapient Count de Buffon*, we should infer that the European species is *a variety of our more generous race, degenerated by the influence of food and climate!*

** Arctic Zoology.

In the breeding season the Duck Hawk retires to the recesses of the gloomy cedar swamps, on the tall trees of which it constructs its nest, and rears its young secure from all molestation. In those wilds, which present obstacles almost insuperable to the foot of man, the screams of this bird, occasionally mingled with the hoarse tones of the Heron, and the hooting of the Great-horned Owl, echoing through the dreary solitude, arouse in the imagination all the frightful imagery of desolation. Mr. Wilson and the writer of this article explored two of these swamps in the month of May, 1813, in pursuit of the Great Heron and the subject of this chapter; and although they were successful in obtaining the former, yet the latter eluded their research.

The Great-footed Hawk is twenty inches in length, and three feet eight inches in extent; the bill is inflated, short and strong, of a light blue color, ending in black, the upper mandible with a tooth-like process, the lower with a corresponding notch, and truncate; nostrils round, with a central point like the pistil of a flower; the eye is large and dark, surrounded with a broad bare yellowish skin, the cartilage over it yellow and prominent; frontlet whitish; the head above, cheeks running off like mustaches, and back are black; the wings and scapulars are brownish black, each feather edged with paler, the former long and pointed, reaching almost to the end of the tail; the primaries and secondaries are marked transversely on the inner vanes with large oblong spots of ferruginous white, the exterior edge of the tip of the secondaries curiously scalloped, as if a piece had been cut out; the tertials incline to ash color; the lining of the wings is beautifully barred with black and white, and tinged with ferruginous; on a close examination the scapulars and tertials are found to be barred with faint ash; all the shafts are black; the rump and tail coverts are light ash, marked with large dusky bars; the tail is rounding, black, tipped with reddish white, and crossed with eight narrow bars of very faint ash; the chin and breast, encircling the black

mustaches, are of a pale buff color; breast below and lower parts reddish buff, or pale cinnamon, handsomely marked with roundish or heart shaped spots of black; sides broadly barred with black; the femorals are elegantly ornamented with herring-bones of black on a buff ground; the vent is pale buff, marked as the femorals, though with less numerous spots; the feet and legs are of a corn yellow, the latter short and stout, feathered a little below the knees, the bare part one inch in length; span of the foot five inches, with a large protuberant sole; the claws are large and black, hind claw the largest. Whether the cere is yellow, or flesh colored we were uncertain, as the bird had been some time killed when received, supposed the former.

The most striking characters of this species are the broad patch of black dropping below the eye, and the uncommonly large feet. It is stout, heavy, and firmly put together.

The bird from which the above description was taken, was shot in a cedar swamp in Cape May county, New Jersey. It was a female, and contained the remains of small birds, among which were discovered the legs of the Sanderling Plover. The figure in the plate is an excellent resemblance of the original, which is handsomely set up in the museum of Mr. Peale.

LESSER RED-POLL.*

FRINGILLA LINARIA.

[Plate XXX.—Fig. 4.]

TURTON's *Linnæus*, I, p. 562.—BEWICK's *British Birds*, I, p. 191.—*Br. Zool.* No. 132. *Arct. Zool.* No. 262.—*Le Cabaret?* BUFF. *Ois.* VII, 109. *Pl. enl.* No. 485.—BELON, *av.* 356.—ALBIN, III, p. 31.—*Ph. Trans.* lxii, 405.—*Grasiska, Faun. Suec.* No. 241.

CONTRARY to the usual practice of Mr. Wilson, he omitted to furnish a *particular* description of this species, accompanying its figure in the fourth volume of the present work. But this supplementary notice would not have been considered necessary, if our author had not fallen into a mistake respecting the markings of the female and the young male; the former of which he describes as *destitute of the crimson on the forehead*; and the latter *not receiving that ornament till the succeeding spring*. When Mr. Wilson procured his specimens, it was in the autumn, previously to their receiving their perfect winter dress; and he was never afterwards aware of his error, owing to the circumstance of these birds seldom appearing in the neighborhood of Philadelphia. Considerable flocks of them, however, have visited us this winter; and we have been enabled to procure several fine specimens of both sexes, from the most perfect of which we have taken the following description. We will add, that having had the good fortune to observe a flock, consisting of nearly an hundred, within a few feet of them, as they were busily engaged in picking the seeds of the Wild Orache,† we can with confidence assert that they *all* had the red patch on the crown; but there were very few which had the red rump and breast; the young males, it is probable, are not

* See vol. iv of this work, p. 42.

† *Atriplex hastata*, Linn.

thus marked until the spring; and the females are destitute of that ornament altogether.

The Lesser Red-poll is five inches and a quarter in length, and eight inches and a half in breadth; the bill is pale yellow, ridged above and below with dark horn color, the upper mandible projecting somewhat over the lower at the tip; irides dark hazel; the nostrils are covered with recumbent, hair-like feathers of drab color; a line of brown extends from the eyes, and encircles the base of the bill, forming in some specimens a patch below the chin; the crown is ornamented with a pretty large spot of deep shining crimson; the throat, breast and rump stained with the same, but of a more delicate red; the belly is of a very pale ash, or dull white; the sides are streaked with dusky; the whole upper parts are brown or dusky, the plumage edged with yellowish white and pale ash, the latter most predominant near the rump; wings and tail dusky, the latter is forked, and consists of twelve feathers edged with white; the primaries are very slightly tipped and edged with white; the secondaries more so; the greater and lesser coverts are also tipped with white, forming the bars across the wings; thighs cinereous; legs and feet black; hind claw considerably hooked, and longer than the rest.

The female is less bright in her plumage above; and her under parts incline more to an ash color; the spot on her crown is of a golden crimson, or reddish saffron color.

One male specimen was considerably larger than the rest; it measured five inches and three quarters in length, and nine inches and a quarter in extent; the breast and rump were tawny; its claws were uncommonly long, the hind one measured nearly three eighths of an inch; and the spot on the crown was of a darker hue than that of the rest.

The call of this bird exactly resembles that of the *Fringilla tristis*, or common Yellow-bird of Pennsylvania.

The Red-polls linger in the neighborhood of Philadelphia until about the middle of April; but whither they retire for the business of incubation we cannot determine.

In common with almost all our Finches, the Red-polls become very fat, and are then accounted delicious eating. During the last winter many hundreds of them were exposed to sale in the Philadelphia market, and were readily purchased by those epicures whose love of variety permits no delicacy to escape them.

BALD EAGLE.*

FALCO LEUCOCEPHALUS.

[Plate XXXVI.]

IN Mr. Wilson's history of the Bald Eagle, he confidently asserts that it is the same species as the Sea Eagle, in a different stage of color. In his account of the latter,† he adduces additional reasons for his belief, which is at variance with the opinions of the most respectable naturalists of Europe. We have no hesitation, from our own experience, in pronouncing these birds to be the same; and consider it unnecessary to add any thing further on the subject, as the reasoning of Mr. Wilson is conclusive.

Our author, vol. vii, page 19, describes an Eagle's nest, which he visited, in company with the editor, on the eighteenth of May, 1812. It was then empty; but from every appearance a brood had been hatched and reared in it that season. The following year, on the first day of March, a friend of ours took from the same nest three eggs, the largest of which measured three inches and a quarter in length, two and a quarter in diameter, upwards of seven in circumference, and weighed four ounces five drams apothecaries weight; the color a dirty yellowish white—one was of a very pale bluish white; the young were perfectly formed. Such was the solicitude of the female to preserve her eggs, that she did not abandon the nest until several blows, with an axe, had been given the tree.

In the History of Lewis and Clark's Expedition, we find the following account of an Eagle's nest, which must have added not

* See vol. iv, p. 89.

† vol. vii, p. 16.

a little to the picturesque effect of the magnificent scenery at the Falls of the Missouri:

“Just below the upper pitch is a little island in the middle of the river, well covered with timber. Here on a cottonwood tree an Eagle had fixed its nest, and seemed the undisputed mistress of a spot, to contest whose dominion neither man nor beast would venture across the gulfs that surround it, and which is further secured by the mist rising from the falls.”*

The Bald Eagle was observed by Lewis and Clark during their whole route to the Pacific Ocean.

* Hist. of the Exped. vol. i, p. 264.

GOOSANDER.*

MERGUS MERGANSER.

[Plate LXVIII.—Fig. 1.]

TURT. *Syst.* I, p. 334.—BEWICK, II, p. 228.—PENN. *Br. Zool.* II, p. 469, No. 260.

ON the twenty-ninth of January, of the present year, the editor procured a fine full plumaged specimen of the male Goosander, which was shot in the Delaware below Philadelphia; it was in good condition, and weighed three pounds thirteen ounces avoirdupois. This bird was examined with accuracy; and as we are not satisfied with the description accompanying the history of this species in the eighth volume of the present work, we have resolved upon giving another, chiefly for the gratification of those naturalists of Europe who may feel disposed to compare our Goosander with theirs. Mr. Wilson must have certainly described from a bad specimen; and, as will hereafter appear, it had been some time killed. As the figure was colored from a wretched stuffed subject, we regret to say that it gives but an imperfect idea of this elegant bird, which perhaps is second to none of our web-footed tribes in beauty, if we except that universal favorite, the Wood Duck.

The Goosander is a broad, long-bodied and flat-backed bird. It is a great diver, and remains under water for a considerable time. It is likewise very shy and hard to be obtained, unless there is ice in the river, at which time it may be approached in disguise, the gunner and his boat being clothed in white, so as to resemble floating ice. It appears to live entirely on fish, which

* See vol. viii, p. 68.

its sharp-toothed and hooked bill is admirably calculated for securing. It rises from the water with considerable flustering, its wings being small and short; but when in the air it flies with great swiftness. It is a singular circumstance that those Goosanders which are seen in the Delaware and Schuylkill, in the vicinity of Philadelphia, are principally old males.

The male Goosander is twenty-six inches in length, and thirty-seven in extent; the bill to the angles of the mouth is three inches long, nearly an inch thick at the base, strongly toothed on both mandibles, the upper with two corresponding rows of fine teeth within, the lower divided to the nail, and connected by a thin elastic membrane, which admits of considerable expansion to facilitate the passage of fish; nostrils subovated, broader on the hind part and pervious; the bill is black above and below, its sides are crimson; the tongue is long, pointed, furnished with a double row of papillæ running along the middle, and has a hairy border; irides golden; the frontlet, lores, area of the eyes, and throat jet black; head crested, tumid, and of a beautiful glossy bottle green color, which extends nearly half way down the neck, the remainder of which with the exterior part of the scapulars, the lesser coverts, the greater part of the secondaries, the tertials and lining of the wings white, delicately tinged with cream color; the breast and whole lower parts are of a rich yellowish cream; the upper part of the back, and the interior scapulars are of a fine glossy black; the primaries and exterior part of the secondaries, with their coverts, are brownish black; the lower part of nearly all the coverts of the secondaries white, the upper part black, forming a bar across the wing; the shoulder of the wing is brownish ash, the feathers tipped with black; the middle and lower parts of the back, and tail coverts ash, the plumage centred with brown; the tail is brownish ash, rounded, composed of eighteen feathers, and extends about three inches beyond the wings; the flanks are marked with waving, finely dotted lines of ash on a white ground;

the tertials on the outer vanes are edged with black; the legs and feet are of a rich orange; the toes are long, middle one *somewhat the longest*, claws flesh colored. The whole plumage is of a silky softness, particularly that of the head and neck, which feels like the most delicate velvet.

Both Bewick and Wilson represent the feet and legs of this species as of the color of red sealing wax. This is an error which arose from the circumstance of their having seen their specimens some time after they had been killed. When the bird is alive these parts are of a beautiful orange, which changes after death to the color they mention.

It is conjectured by the ornithologists of Europe that the Goosander commonly breeds in hollow trees. I have little doubt that this is the case. In the month of August, 1813, being but a short distance from lake Erie, I saw several Mergansers, either of the present species, or of the Red-breasted, in a creek; and was informed that they were common throughout the summer in those parts, and bred, like the Wood Duck, in hollow trees.

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